THE ORGANIZATION AND FUNCTIONS OF THE DIVISION OF SANITATION WESTCHESTER COUNTY DEPARTMENT OF HEALTH

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Westchester County Office Building

One wing of the newly constructed office building, on the second floor of which is located the Westchester County Department of Health.

PREFACE

Not every engineer can expect to construct bridges, skyscrapers, or sewage treatment works, but his training is of value in correlative fields of organization, administration and supervision. It is hoped that this exposition of one field of sanitary engineering work will be of some value to prospective civil engineers whose option of study is sanitary engineering.

J.L.B.

White Plains, N.Y.
April, 1932

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INTRODUCTION

The administration of public health is in process of change from the haphazard activities of local medical practitioners, limited in training, lacking in time and assistance, and all too frequently blind or indifferent to their responsibilities, to an administrative unit composed of trained specialists, alive to the problems and methods of public health control, and functioning in an area and for a population large enough to maintain and fully employ such a unit.

The local isolated health officier is no longer an effective agent for promoting the public health as that function of government is now conceived and sponsored by many of the well organized state departments of health. There exists far too wide a gap between the formulated policies and developed methods of procedure of the state organizations and their application to the people through the instrumentality of the local health officer. To close this gap the so-called county health unit has come into being in recent years as an agency to translate the policies and program of public health control into accomplishment in the form of disease prevention and improved environment.

The situation in official public health work may be made clear by a somewhat crude comparison. Picture a modern and powerful tractor drawing around a field a number

of the pointed sticks such as were in ancestral use for the cultivation of the soil. Compare the results of such cultivation with those obtained by substituting for the primitive sticks an assembly of sharp steel plows coupled in turn with disc and harrow. In the first instance, there results a mere scratching of the surface with many strips of earth untouched; in the latter case, the soil is evenly turned, cut, and broken up for the crop which is to follow. The tractor is the well-organized state department, furnishing impulse and guidance to the tools of cultivation in the fields of health. The tools may be ineffective local health officers or well-rounded county health units.

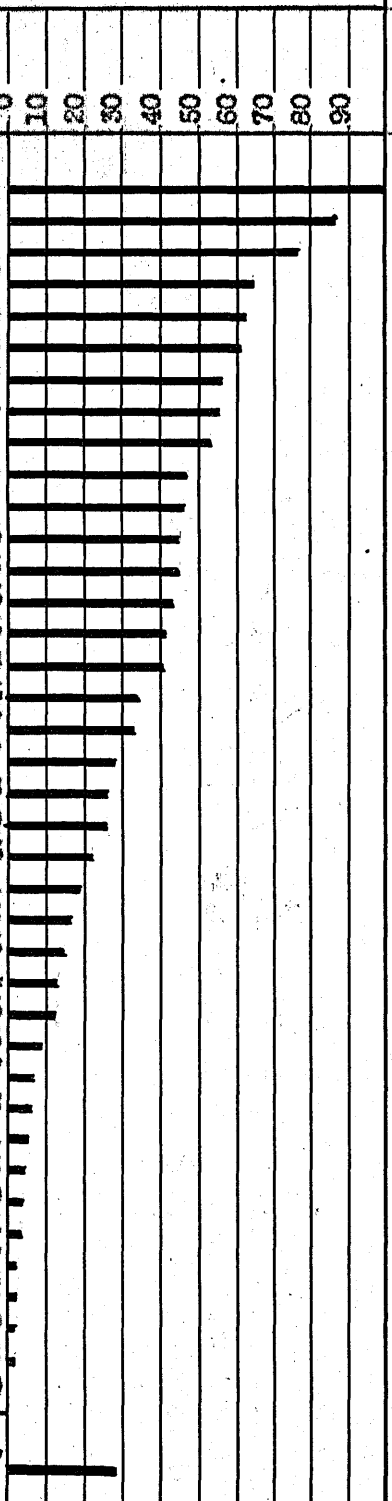
That the county has been the only convenient geographic and political unit for the newer method of local public health administration is, in many instances, unfortunate since limited population and taxable wealth in the more rural counties impose serious restrictions on personnel and activities. The formation of districts composed of counties aggregating the desired population and wealth may, in some instances, become the more effective unit requiring, however, the submerging of political incompatibilities and the proper balancing of time and transportation factors.

The first full time county health unit in the United States was established in 1911. On January 1, 1930 there were 534 such units. The development of this form of public health administration has been promoted by the United States Public Health Service, the International Health

TABLE NO. I

COUNTY HEALTH UNITS IN UNITED STATES

State	Whole-Time County or Local District Health Units January 1					Percentage of Rural Population Served as of January 1, 1931
	1927	1928	1929	1930	1931	%
Delaware	0	0	0	0	3	100.00
Alabama	30	33	50	51	54	85.49
Maryland	6	8	9	11	14	76.21
Arizona	2	3	3	3	6	63.37
Ohio	47	47	45	46	46	61.54
S. Carolina	16	16	20	23	23	60.48
Louisiana	10	28	29	31	31	55.80
N. Carolina	37	37	39	38	39	55.16
Tennessee	14	17	23	38	42	52.43
California	9	9	11	12	13	47.13
Oregon	5	7	7	7	8	46.19
W. Virginia	13	14	14	15	16	44.46
Washington	6	7	7	8	8	44.46
Kentucky	9	32	39	45	43	43.65
Mississippi	18	24	29	28	28	40.95
Arkansas	3	21	24	21	24	40.88
New Mexico	9	8	7	7	8	33.86
Virginia	15	14	16	17	20	32.37
Missouri	12	14	12	13	13	27.87
Georgia	24	27	31	34	30	26.58
Michigan	0	0	3	4	24	26.20
Connecticut	1	1	1	1	1	21.06
Oklahoma	9	9	10	9	9	19.91
Kansas	9	10	10	11	12	16.22
Pennsylvania	0	0	0	0	3	14.73
New York	1	1	2	4	4	12.64
Utah	6	5	3	3	2	12.13
Montana	3	3	3	4	4	9.85
Idaho	0	0	0	2	1	6.67
Maine	5	4	4	4	4	6.58
Texas	5	4	4	6	7	5.31
Florida	3	3	3	3	3	4.73
Minnesota	1	1	1	1	1	3.70
Massachusetts	1	1	1	1	1	3.23
Colorado	1	1	1	1	1	3.67
Iowa	1	0	0	0	2	2.52
Illinois	3	3	4	3	2	2.00
S. Dakota	2	1	1	1	1	1.72
Wyoming	1	1	1	0	0	0
TOTALS	337	414	467	505	557	28.27



From Report of New York State Health Commission, 1932.

Board, and certain other privately endowed health agencies, cooperating with the various state departments of health. In many of the states, particularly in the south, these units have been organized in areas previously without effective local health service. In those states, such as New York, where active state departments have most effectively organized local health officers, the growth of county health units has been slower. Table No. I shows the number of county health units operating in the United States in the years from 1927 to 1931, together with the percentage of rural population served, as of January 1, 1931.

Chapter I

THE WESTCHESTER UNIT

In the state of New York four county health units have thus far been established and of these the Westchester County Department of Health is the largest and most elaborate in its organization. It was formed on January 1, 1930, by resolution of the Westchester County Board of Supervisors, acting under authority of Section 20b of the Public Health Law. This statute provides for a board of health consisting of seven members, a commissioner, first deputy commissioner, and such other personnel as is deemed necessary to carry on the functions of the health authority. Cities in the county were not included in the unit, but could voluntarily enter and submit to its control. Consequently, the cities of Yonkers, Mt. Vernon, New Rochelle and White Plains retained their separate health departments, the latter, however, entering the county department on January 1, 1931. All local boards of health ceased to exist, except in villages having a population over 3,000, and all remaining local health officers became subject to the direction of the county health commissioner. State aid was granted for fifty per cent of the budget approved by the board of supervisors and the budget for 1930 was appropriated in the amount of $100,000.

The new unit was fortunate in inducing Dr. Matthias Nicoll, for seven years commissioner of health for the state of New York, to leave that position to become commissioner of the Westchester County Department of Health. He had long been an outstanding figure in the field of public health and the new position offered to him an opportunity to demonstrate the potentialities of a county health unit under the very favorable circumstances existing in Westchester.

Bounded on the south by Long Island Sound and the Borough of the Bronx, on the west by the Hudson River, on the north by the extremely rural Putnam County, and on the east by Connecticut, Westchester has an area of 448 square miles and a population, according to the 1930 census of 520,947. The health district has a population of 270,802. Westchester's topography is rough, rock strewn, and cut by many small streams, some more recently inundated by the huge reservoirs of the New York City water system. Its wooded hills and valleys form the setting for many estates of wealthy and prominent people. The lower third of the county is largely urban and the upper section is dotted with small hamlets and large villages, among which are celebrated now and then two hundredth or two hundred and fiftieth anniversaries of their settlement. Proximity to New York City, together with good rapid transit facilities, have tended to establish Westchester's character

as a commuting area, with a standard of living above average, high land values, and extensive and elaborate public improvements including schools, highways, and parks. There is also a considerable infiltration of the foreign-born and of natives of foreign extraction, particularly Italian, from New York City. These are concentrated principally in the more densely populated areas in the south and southwestern portions of the county.

The organization of the Westchester County Department of Health is based on a separation of functions administered by separate groups of personnel. Each group of any size is designated as a division of the department. All division heads are responsible directly to the commissioner, who outlines policies and collaborates in determining procedure.

Administrative details, employment of office personnel, budget making and supervision of departmental finances are largely in the hands of the first deputy commissioner. Another deputy commissioner functions principally in handling the outside contacts of the department and in the organization of clinics. Another deputy is directly in charge of the city health center in White Plains.

The control of communicable disease is under the direction of a trained epidemiologist who supervises all control procedure, makes epidemiological investigations of communicable disease, acts as a consulting diagnostician, and assists in the operation of immunization clinics.

The tuberculosis division is under the direction of a tuberculosis expert, assisted by a clinician. A technician operates portable X-ray equipment at clinics held throughout the health district.

A woman pediatrician has charge of baby and prenatal clinics and of child hygiene educational activities. She is assisted by an oral hygienist who conducts preschool dental clinics.

In the nursing division a director has charge of the activities of sixteen nurses, who in turn carry on supervisory and advisory work in nursing districts, wherein they cooperate with the local nurses employed by the towns and villages and by the various nursing associations. These nurses carry out communicable disease control procedure and assist in the clinics. Specially trained nurses carry on work in orthopedics.

A trained statistician has charge of vital statistics and prepares data and reports on morbidity and mortality.

The division of sanitation is under the direction of a sanitary engineer experienced in public health work. This division carries on the work of sanitary inspection, gives public health supervision to water supplies, sewage treatment plants, and swimming pools, investigates and abates health nuisances and supervises public milk supplies.

All employees of the Westchester County Department of Health are in the state civil service and participate in

WESTCHESTER COUNTY HEALTH DISTRICT

the state retirement pension system. The personnel of the department increased from two in January, 1930, to twenty-two in December of that year. A major increase was made on January 1, 1931, and on January 1, 1932, there were fifty-six employees. The budget of $100,000 in 1930 has increased to $206,000 for 1932. No fees are charged for any of the services of the department.

Chapter II

ORGANIZATION OF THE DIVISION OF SANITATION

Public health work has two distinct phases of activity. One concerns the individual as a disseminator of disease, and the other deals with environmental conditions common to large numbers of the population. The first activity is largely in the hands of medical practitioners; the second is essentially engineering in nature. Environmental sanitation as a phase of governmental activity was most clearly justified in such undertakings as control of yellow fever, cholera, bubonic plague, malaria and typhoid fever. The responsibility of the government through its public health organizations for the safety of the public water supplies, for effective means of sewage disposal, for supervision of milk sanitation, and for the control in part of many other environmental factors is generally recognized and accepted. The federal government operates through its various departments to secure proper sanitation of meats and other foods, to insure the safety of water supplies on interstate carriers, to enforce quarantine regulations, and to give educational and financial assistance to other health agencies.

Effective environmental sanitation can only be accomplished by trained sanitarians. The work of the untrained, uneducated sanitary inspector no longer meets the

needs of the present civilization. State departments of health have long recognized the value of engineering training as a background for the administrative and technical duties of those dealing with environmental sanitation, but the use of engineers has only recently extended to the smaller units of public health administration.

The division of sanitation was initiated on April 1, 1930, by the employment of the author who was selected by Commissioner Nicoll from the engineering staff of the New York State Department of Health for a provisional appointment to this position. This appointment was later confirmed following competitive examination. The general qualifications for this position are shown in the following excerpt from the published notice of civil service examination which prescribes the requirements as to duties, training and experience.

> The duties of the position include acting as personal representative of the county health officer wherever assigned within the county of Westchester, especially to investigate and advise on the operation of water supplies, sewage disposal works and swimming pools; supervising milk sanitation; examining alleged nuisances; and dealing with general problems of public health sanitation. Candidates must be graduates of a course of either civil, chemical or public health engineering for which a degree is granted and, in addition, must have had since graduation not less than five years of satisfactory experience as a sanitary engineer dealing with public health sanitation. It is desired that candidates shall possess agreeable personalities, sound judgment, and ability to present matters of public health sanitation in a forceful and convincing manner to official or non-official bodies or individuals, and that they shall have had experience in making laboratory examinations of water and sewage and

> in inspection of milk production and pasteurization. The examination is open to residents of any county of New York State.

Recognition of the immediate necessity for supervision of the public milk supply led to the appointment of a milk inspector on May 1. A sanitary inspector with engineering training was employed on July 1, but no further increase of personnel was made until the general expansion of the department to a full organization in January, 1931. At this time two sanitary inspectors were added, followed shortly by the employment of a sanitary engineer, a veterinarian, and a second milk inspector. During the summer of 1931 two temporary inspectors were employed, one on milk sanitation and the other, an engineer, to deal with the greatly increased number of alleged public health nuisances reported to the department. The temporary milk inspector was given a regular position on January 1, 1932.

As a result of a recent tentative reclassification of county employees, the general duties and requirements for four grades of employees in the division of sanitation have been established. These specifications are here included in order to cover briefly the duties and qualifications of these employees.

> Sanitary Inspector: Under general supervision, to make inspections of meats and foods and of food selling places and eating places; to investigate reported unsanitary conditions; and to do other work as required.
>
> Typical tasks: Making inspections to enforce the requirements of the sanitary code in food selling and eating places; inspecting

meats and foods and condemning unwholesome meats and foods; inspecting abattoirs; investigating complaints of unsanitary or unhealthy conditions; quarantining dogs for rabies; maintaining file records; making reports of investigations.

Minimum qualifications: Either (1) education equivalent to that represented by graduation from a standard high school, five years of experience in judging meats and handling foods, some previous experience in making sanitary inspections being desirable, or (2) some other combination of education and sanitary inspection experience of equal or greater value; thorough knowledge of the provisions of the sanitary code; investigating ability; integrity; good judgment; tact; ability to deal with the public.

Milk Sanitarian: Under general supervision to make field inspections of dairy plants for the purpose of enforcing the state and county sanitary codes regarding milk and cream; and to do other work as required.

Typical tasks: Inspecting dairy farms, shipping stations, pasteurizing plants and equipment, bottling plants, and other places where milk is produced and prepared for sale for the purpose of enforcing the provisions of the sanitary code applying to milk and cream; investigating complaints concerning unsanitary or unhealthy conditions at places where milk is produced or prepared for public consumption; collecting milk and cream samples; investigating causes of unsatisfactory bacterial conditions; making Babcock tests and bacteria counts; checking applications for milk dealer permits; preparing evidence for hearings on violations of the sanitary code; interviewing office callers, keeping records, preparing reports; receiving and answering correspondence relating to the work.

Minimum qualifications: Either (1) education equivalent to that represented by graduation from not less than a two year course at a recognized school of agriculture, such a course to include work in dairying and milk bacteriology, two years of experience in milk inspection or milk laboratory control work, or (2) some other combination of education and experience in dairying and milk inspection work of equal or greater value; thorough knowledge of the state and county sanitary codes applying to the production and sale of milk and cream; investigating ability; integrity; good judgment; initiative; tact; ability to deal with the public.

Sanitary Engineer; Under the general supervision of the director, division of sanitation, to do responsible sanitary engineering work in connection with the work of the department; and to do other work as required.

Typical tasks; Inspecting public and semi-public water supplies, water sheds, wells and reservoirs; inspecting sewage treatment plants both public and private for the purpose of determining the adequacy of operation and efficiency of treatment; making inspections for the approval of plans and the issuance of permits for sewage disposal systems; making inspections and sanitary surveys of private water supplies for pollution as suspected or occurring; supervising the operation of swimming pools; collecting samples of water for tests and conducting tests; investigating and aiding in the abatement of public health nuisances; making charts and maps; keeping records; preparing reports; receiving and answering correspondence relating to the sanitary engineering work.

Minimum qualifications: Either (1) education equivalent to that represented by graduation from a course in sanitary engineering from a college or university of recognized standing, or (2) some other combination of education and sanitary engineering experience of equal or greater length; thorough knowledge of theory and practice of sanitary engineering; thorough knowledge of the state and county sanitary codes; good judgment; initiative; integrity; tact; ability to deal with the public.

Veterinarian: Under the general supervision of the director, division of sanitation, to do reponsible work in connection with the prevention, control and eradication of communicable diseases among domestic animals; and to do other work as required.

Typical tasks: Making tests of cattle in Westchester County in order to detect the presence of bovine tuberculosis; issuing health certificates for cattle; producing serum virus and other biologicals; consulting and advising with farmers in regard to diseases affecting domestic animals; examining dogs where rabies are suspected; making inspections of poultry and meat markets; conducting laboratory experiments in veterinary science; investigating conditions causing unsanitary milk; keeping

records; making reports; receiving and answering correspondence relating to the inspection of herds and the condemnation of cattle.

Minimum qualifications: Graduation from a school of veterinary medicine of recognized standing; three years of experience in the practice of veterinary medicine or in laboratory research work in veterinary medicine; possession of a valid license to practice veterinary medicine in the state of New York; skill in veterinary science; good judgment; initiative; integrity; tact; ability to deal with the public.

It has been the policy to employ personnel with a high standard of educational training and experience and, fortunately, it has been possible to pay salaries to attract this type of employee. These men have, therefore, been capable of doing effective work from the beginning of their employment and the division has developed its functions with considerable rapidity.

All members of the division, unless on special assignment, report at 9 A.M. and arrange their work for the day in consultation with the division director. Correspondence prepared by the personnel is checked over and signed by the director. Each member is responsible for the maintenance of office records pertaining to his particular work, including an individual diary from which is compiled a monthly summary. These summaries are used by the director in making up the monthly report of division activities for the commissioner. Table No. II on page 16 is a general summary of division activities for 1931.

The engineering members do considerable work on charts, graphs, and drawings for other divisions of the

TABLE NO. II

SUMMARY OF ACTIVITIES - DIVISION OF SANITATION - 1951.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Investigations and Inspections:													
Public water supplies		8	11	7	12	11	4	14	6	16	3	7	99
Private water supplies	3	3	8	31	21	50	22	18	13	27	13	1	210
Sewers and sewage disposal works	3	5	7	7	4	13	10	9	3	3	1		65
Private sewage disposal systems				21	15	14	29	30	34	26	34	28	251
Complaints and nuisances	48	51	56	115	87	85	107	84	99	71	75	57	933
Swimming pools	7	10	23	15	52	63	47	51	45	14	11	8	304
Camps				4	2	2	6	3		1	2		20
Pasteurizing plants and shipping stations	8	8	14	6	11	36	17	25	74	61	84	45	389
Milk bottling plants	7	20	11	14	57	38	37	60	49	54	49	67	463
Milk producers	10	40	36	22	51	40	57	84	58	55	63	134	650
Milk distributing stations	6	1	8	3	10	14	14	33	23	30	37	34	213
Stores		24	54	2	27	2	5	3	4	5	4	3	133
Abattoirs	2	1				20	29	15	5	10	14	7	103
Suspected rabid dogs					16	22	24	11	10	6	8	11	108
Herds tuberculin tested		19	47	58	34	29	22	36	35	36	19	29	359
Conferences in office and field	64	89	99	127	97	91	124	130	148	145	149	171	1434
Water samples collected	7	5	17	56	33	63	41	49	43	24	10		348
Milk and cream samples collected					252	317	323	342	379	338	315	316	2582

Table does not include work of two sanitary inspectors

health department. One member operates the motion picture camera owned by the department for securing pictures of clinics and other public health activities, and he also uses this means of securing evidence for the division of sanitation in connection with abatement of public health nuisances. Each inspector is provided with an automobile, which is maintained at county expense.

Chapter III

WATER SUPPLIES

The Westchester County health district has twenty-three sources of public water supply and forty-one public distribution systems. The major source of water is the New York City water supply system, the principal reservoirs of which are in Westchester County. Kensico reservoir, with a capacity of about twenty-two billion gallons, lies near the center of the county and is the main storage reservoir feeding directly into the city system. Water is delivered to it from the Catskill system of reservoirs lying west of the Hudson River. The Croton system, including the oldest of the storage reservoirs, impounds about one hundred billion gallons from a large area in the northern part of Westchester and in Putnam County. This supply is delivered to the New York City system through two aqueducts. Recently a pumping station, having a capacity of one hundred and eighty million gallons per day, has been constructed to lift water from the Croton reservoir to the Catskill aqueduct and thence to Kensico. The purpose of this pumping station is to utilize an excess of water from the Croton system by transferring it from the Croton aqueducts of limited capacity to the Catskill aqueduct which has some unused capacity.

New York City is obligated to supply water to any of the communities in Westchester desiring to purchase

it and which have access to the aqueducts or reservoirs. These communities are charged rates based on those existing in New York City. The rates in Westchester at the present time vary from $66.67 to $100 per million gallons. The purchasers of this water must provide the necessary pumping facilities and in certain places must also treat the supply by means of chlorine. Twenty-one communities and a number of private or institutional consumers were supplied in whole or in part with New York City water in 1931.

Another major supply is that furnished from a number of sources by the Community Water Service Corporation. This company has storage reservoirs and a treatment plant near Greenwich, Connecticut, from which it supplies Port Chester and Rye. It operates the New Rochelle Water Company, which secures practically all of its supply from the New York City system, and also owns the Pocantico Division of the New Rochelle Water Company which supplies several villages along the Hudson River. A number of other municipalities secure supplies from small water sheds or streams. Ground water is available in limited quantities for public supply purposes in a very few localities. There are listed in Table No. III the communities in the health district which have public supplies, together with information concerning the sources of these supplies and the methods of treatment. A list of quasi-public water supplies is also added, most of these being used in realty developments or summer colonies.

Table No. III

PUBLIC WATER SUPPLIES
WESTCHESTER COUNTY HEALTH DISTRICT

Place and Source	Treatment
Ardsley V. Pocantico Division New Rochelle Water Co., Pocantico River	Storage, coagulation, pH control, pressure filters, chlorination
Bedford Hills Water District, Well	
Bronxville V. New Rochelle Water Co., Catskill aqueduct; emergency- Hutchison River reservoir	Storage, aeration, chlorination, by N. Y. C.; pH control
Briarcliff Manor V. Wells	Chlorination
Cortlandt Tn. Water District #1, Catskill aqueduct	Storage, aeration, chlorination by N. Y. C.
Croton-on-Hudson V. Wells	
Dobbs Ferry V. Pocantico Division, New Rochelle Water Co.	See Ardsley
Eastchester Tn. New Rochelle Water Co.	See Bronxville
Elmsford V. Catskill aqueduct	Storage, aeration, chlorination by N. Y. C.
Fairview Water District, Catskill aqueduct	Storage, aeration, chlorination by N. Y. C.
Glenville Water District, Tarrytown	See Tarrytown
Greenville Water District, Catskill aqueduct	Storage, aeration, chlorination by N. Y. C.; pH control
Harrison Water District #1, Westchester Joint Water Works- Mamaroneck River	Storage, ammoniation, prechlorination, coagulation, rapid sand filtration, aeration, post chlorination

Place and Source	Treatment
Harrison Water District #2, Wells	
Hartsdale Water District, Catskill aqueduct	Storage, aeration, chlorination by N. Y. C.; pH control
Hastings V. Pocantico Division, New Rochelle Water Co.	See Ardsley
Hawthorne Water District, under construction	
Irvington V. Surface reservoir or Pocantico Division	Storage, chlorination
Katonah Water District, Well, N.Y.C.	
Knollwood Water District, Catskill aqueduct	Storage, aeration, chlorination by N. Y. C.
Larchmont V. Shelldrake River	Storage, aeration, coagulation, rapid sand filtration, chlorination
Mamaroneck Tn. and V. Westchester Joint Water Works, Mamaroneck River	See Harrison
Mt. Kisco V. Byram Lake, N.Y.C.	Storage, chlorination
New Castle Water District, Catskill aqueduct	Storage, chlorination by N.Y.C.: pH control, chlorination
North Castle Water District, Catskill aqueduct	Storage, aeration, chlorination by N.Y.C.
North Pelham V. New Rochelle Water Co.	See Bronxville
North Tarrytown V. New Croton aqueduct	Storage, chlorination
Ossining V. Indian Brook; New Croton aqueduct	Storage, aeration, prechlorination, coagulation, rapid sand filtration, pH control, post chlorination, aeration

Place and Source	Treatment
Peekskill V. Peekskill Hollow Brook	Storage, aeration, prechlorination, slow sand filtration, post chlorination
Pelham V. New Rochelle Water Co.	See Bronxville
Pelham Manor V. New Rochelle Water Co.	See Bronxville
Pleasantville V. Wells	
Port Chester V Greenwich Water Co., Mianus River	Storage, aeration, chlorination, coagulation, rapid sand filtration
Rye Tn. and V. Greenwich Water Co., Mianus River	See Port Chester
Scarsdale V. Pocantico Division, New Rochelle Water Co.	See Ardsley
Tarrytown V. Surface reservoir	Storage, chlorination, pressure filters, aeration
Thornwood Water District, under construction	
Tuckahoe V. New Rochelle Water Co.	See Bronxville
Valhalla Water District, Catskill aqueduct	Storage, aeration, chlorination by N. Y. C.
White Plains City surface reservoirs; wells; N.Y.C. aqueduct	Storage, chlorination
Yorktown Water District, under construction	

QUASI-PUBLIC WATER SUPPLIES

Place	Source
Amawalk Lake North, Tn. of Somers	Springs
Bloomerside, Tn. of North Salem	Well
Croton Falls	Wells and springs
Gedney Farms, White Plains	Wells; cross-connected to White Plains supply
Lake Katonah, Tn. of Lewisboro	Spring and infiltration gallery
Mohegan Manor, Tn. of Yorktown	Well
Mohegan Highlands, Tn. of Yorktown	Mohegan Lake, filtration and chlorination
Mohegan Colony, Tn. of Yorktown	Wells
New Castle Water Co.	Surface reservoir
Pine Lake, Tn. of Cortlandt	Wells
Pietsch Tea Gardens, Tn. of North Salem	Wells
Shenorock Springs, Tn. of Somers	Springs
Vails Grove, Tn. of North Salem	Wells
Lake Truesdale, Tn. of Lewisboro	Wells

From the standpoint of sanitary supervision by the public health authority, many of the public supplies are in excellent condition, particularly those secured from the New York City system, which have the benefit of careful sanitary control of water shed and treatment by the New York City Bureau of Water Supply. The further fact that many of these supplies have been long established has resulted in a clearing up of many of the sanitary problems. However, the rapidly increasing population and consequent encroachment upon existing water sheds creates pollution hazards which must receive the attention of the local health authority. The state department of health is not in position to make frequent inspections, and the responsibility of maintaining adequate knowledge of the sanitary condition of each supply rests largely with the engineers of the division of sanitation.

It has not been possible to establish a regular routine of water supply inspections because of other and more pressing work of the division. However, inspections and investigations adequate for the purpose of public health supervision have been made of all public supplies, the information thus obtained being supplemented by reports of the New York State Department of Health, by laboratory reports on water examinations from many of the supplies, and by examinations of water samples collected by the inspectors of the division.

A number of the larger treatment plants have small laboratories and operators trained to make routine presumptive tests and plate counts on water samples from the plant and distribution system. In addition, several private laboratories have contracts with a number of the municipalities to examine samples of water on a regular weekly or monthly schedule. Samples of water are submitted to the state department of health only as collected by engineers of that department when making water supply inspections.

Although it is the desire of the county department of health that a county laboratory be established in which water and milk samples may be examined, this has not as yet been found practicable by the Westchester County Board of Supervisors, and the county department of health has employed a private laboratory on an annual contract basis to make the examinations of water and milk samples collected by the division of sanitation.

The water samples submitted for examination are accompanied by special file cards upon which the inspector records information concerning the source of the samples and indicates the dilutions to be run in the presumptive tests and such additional chemical determinations as may be desired. This card, shown on page 26, is filled in by the bacteriologist and returned to the division where typed reports are made for transmission to the owner or operator, together with a letter of interpretation or comment. The laboratory report card is placed in the permanent files.

Water Sample File Card

WESTCHESTER COUNTY
DEPARTMENT OF HEALTH

LABORATORY EXAMINATION OF WATER

Tn. or V. .....

Date..... Hour.....

Collected by.....

SAMPLE	BACTERIOLOGICAL						CHEMICAL			
Date Planted	10 c.c.	1 c.c.	0.1 c.c.	0.01 c.c.	Confirmation	37° Count	Alkalinity	Hardness	Chlorides	

Remarks:

Examined by:

Sample from.....

Address .....

Owner..... Address.....

Sanitary Survey (Source, location, depth, diameter, casing, surface, structure, pump equipment, yield, rate, formation, topography, pollution sources, use, treatment, storage, supervision).....

.....

.....

.....

(reverse)

.....

.....

.....

Description of Samples:.....

.....

In order to show typical activities of the division in its supervision of public water supplies, the following instances of the work performed are described:

On the day on which the director reported for work complaints of "red water" were received from the Greenville water district. The complainants were perturbed and angry over the condition of the water and the board of water commissioners had no knowledge of what remedial measures might be taken. Upon investigation it was found that the water supply was secured from the New York City Catskill aqueduct and pumped into a cast iron distribution system laid out in sizes adequate for a large future population. In certain sections of the district consumers were few and scattered and the relatively slow movement of water through the mains permitted excessive corrosion and discoloration of the water. Lime treatment, for the purpose of changing the water from a pH value of about 6.7 to a definitely alkaline condition with a normal carbonate content, was proposed to the board of water commissioners. The board welcomed this suggestion as a solution of their difficulty. A lime dry feed machine was purchased and installed and necessary laboratory equipment secured, as recommended to the board. A satisfactory dosage of lime was determined to be about 5 parts per million for the New York City water which had an alkalinity at that time of about 17 parts per million. The pH value was raised to about 8.4. There was immediate cessation of complaints on the part of consumers and the water has since continued to be satisfactory

Kensico Dam

Water Purification Works of the Westchester Joint Water Works No. 1, Mamaroneck, N. Y.

with the exception of one brief period when, for some unknown reason, the protective carbonate coating in the mains seems to have broken down in one section, releasing considerable iron into the water. This condition was quickly cleared up by an increase in the lime dosage. Since this successful lime treatment of New York City water, equipment for this purpose has been installed and is in use in the Hartsdale and New Castle water districts.

Endemic typhoid has persisted in Port Chester for a long period, approximately ninety cases having occurred since 1916 in certain poor sections of the village. A number of carriers had been located and were under the usual surveillance of the health authority, but it was believed that the numerous private shallow wells in use by the Italian population, among which most of the cases occurred, were a contributory factor in the typhoid infection. Consequently, the division of sanitation undertook a survey of private wells by means of sanitary inspections and examinations of water samples which resulted in the condemnation of about forty wells. These were used principally in the watering of the Italian householders' gardens and vineyards, but also furnished drinking water during the hot weather not only to the owners but to the neighbors. Great excitement and bitterness prevailed when the village authorities were required to close these wells, usually by filling with earth; but the action was believed

to be thoroughly justified because of the seriously polluted condition of the well waters. Fortunately, all of the households were already served by the public supply. Certain wells which were not closed but which are considered questionable are being placarded with the "condemned" signs used by the division of sanitation.

The occasional showing of B. coli in the water supply of Mt. Kisco led to an investigation which revealed an unsatisfactory arrangement for chlorination. This supply is purchased from New York City and pumped from the city-owned Byram Lake to two high level storage basins. These provide gravity pressure in the distribution system to which they are connected by two cast iron mains, one ten inches and the other sixteen inches in diameter. Chlorine was being introduced into the newer sixteen inch main only, although water was found to be flowing to the village through both mains which were cross connected at infrequent intervals. With this arrangement, it was found to be impossible to chlorinate all of the flow or to secure representative samples of the chlorinated water for orthotolidin testing. This condition was corrected by cross connecting the two mains a short distance below the point of chlorination and by using only the sixteen inch main as the outlet from the reservoir. A series of tests were also made over twenty-four hour periods to determine chlorine dosages proper for the maximum and minimum flows. Since that time chlorination of this supply has been much

more satisfactory and no further indication of B. coli has been found. At the present time, the division is investigating a proposal to use a small brook which can be made tributary to the storage basins of the Mt. Kisco supply. The use of this water, which will result in a considerable financial saving to the village water department, will probably be permitted if chlorination of the stream flow is provided at the point of entrance to the basins.

The Westchester Joint Water Works Number One serves a district comprising the towns of Harrison and Mamaroneck, and the village of Mamaroneck. The supply is secured from the Mamaroneck River. The water shed is densely populated and, until recently, considerable sewage pollution entered the stream, particularly following heavy rains. The treatment plant is the most elaborate in the health district, having a capacity of five million gallons per day, and consisting of a small impounding reservoir, mechanical screens at the intake, raw water pumpage, chlorine, ammonia and alum dosage to the raw water, mechanical mixing, a Dorr clarifier, settling basin, four rapid sand filter units, post chlorination, pH control by lime or soda ash, and aeration. The exceedingly wide and quick variation in the pollution load and turbidities in the raw water have made the operation of this plant particularly difficult. The division of sanitation has assisted in improving the treatment processes for taste and

odor prevention, and has also been instrumental in bringing about sewerage improvements which have cleared up, to a large extent, the polluted condition of the stream.

The division of sanitation is frequently called on to assist water departments in removing sources of pollution on the water sheds. Efforts along this line on behalf of the village of Larchmont have led to the formation of a sewer district by the village of Scarsdale and the construction, now under way, of a sewerage system costing $235,000.

In many of the water supplies where chlorination is being carried on by employees not technically trained, it has been necessary to initiate or correct the use of the orthotolidin test and to require maintenance of proper operating records. Two of the public supplies are cross connected to the private distribution systems of industrial plants securing water for fire protection purposes from the Hudson River, which is heavily polluted. Automatic fire pump chlorinators are provided on these industrial supplies as required by the state department of health. It has been necessary to make monthly inspections of these installations and of the double check valves on the cross connections in order to keep them in working order.

In contrast with the public water supplies, the sanitary condition of a number of quasi-public and institutional supplies have been found to be very unsatisfactory, and the division of sanitation has rendered a valuable service in improving certain of these supplies. In

one instance, it wasfound that an institution was securing water from a surface stream and using it without treatment. It was also discovered that another institution about two miles above was discharging improperly purified sewage into the stream. The institution using the water was immediately required to install chlorination apparatus and the institution polluting the stream was required to provide a new sewage treatment plant, which is now under construction.

Many requests are made to the division of sanitation by individuals for advice, concerning the sanitary condition of private water supplies. These people could ordinarily secure competent advice only by employing a civil engineer at considerable expense. Service of this nature, however, is rendered in a great many cases without undue cost or difficulty by the division of sanitation. A considerable portion of the water samples collected by the division are from such private supplies and engineering advice is given concerning the rebuilding of wells and springs and the location and reconstruction of private sewage disposal systems. Surveys have been made of all the public school supplies where the water is not secured from public water supply systems. A number of these school supplies of uncertain quality have been improved, and their resulting safe quality established by further inspections and analyses.

Of considerable engineering interest and economic importance is the question of a county water supply being

discussed at the present time. The population growth, the relatively high cost of New York City water, and the general necessity of pumping wherever this water is used are forcing consideration of a supply proposed to be secured from water sheds in Putnam and Dutchess Counties lying north of Westchester. Such a supply would be similar to that secured by New York City, but could be brought into the county at a higher elevation which would permit gravity distribution to all parts of the county. Preliminary studies of this proposal indicate that it is economically sound since water could be delivered at somewhat less cost than that purchased from New York City, with the further advantage that it would also release valuable water shed properties and local storage reservoirs for other purposes. The director of the division, because of his contact with all of the water supply problems in the county, is in position to furnish information bearing on this project and to take an active part in promoting it.

Chapter IV

SEWERAGE AND SEWAGE DISPOSAL

Westchester County, for purposes of sewage disposal, has access to the Hudson River all along its western boundary and to Long Island Sound on the south. Consequently dilution as a means of treatment or disposal is a most important asset. All of the communities having easy access to these diluting waters have long had sewerage systems, but in most instances no artificial treatment. Inland communities have had to provide expensive sewage treatment plants in order to discharge into the small stream. Others have delayed the construction of sewer systems partly because of the excessive cost and partly in anticipation of artificial outlets being eventually provided by the county.

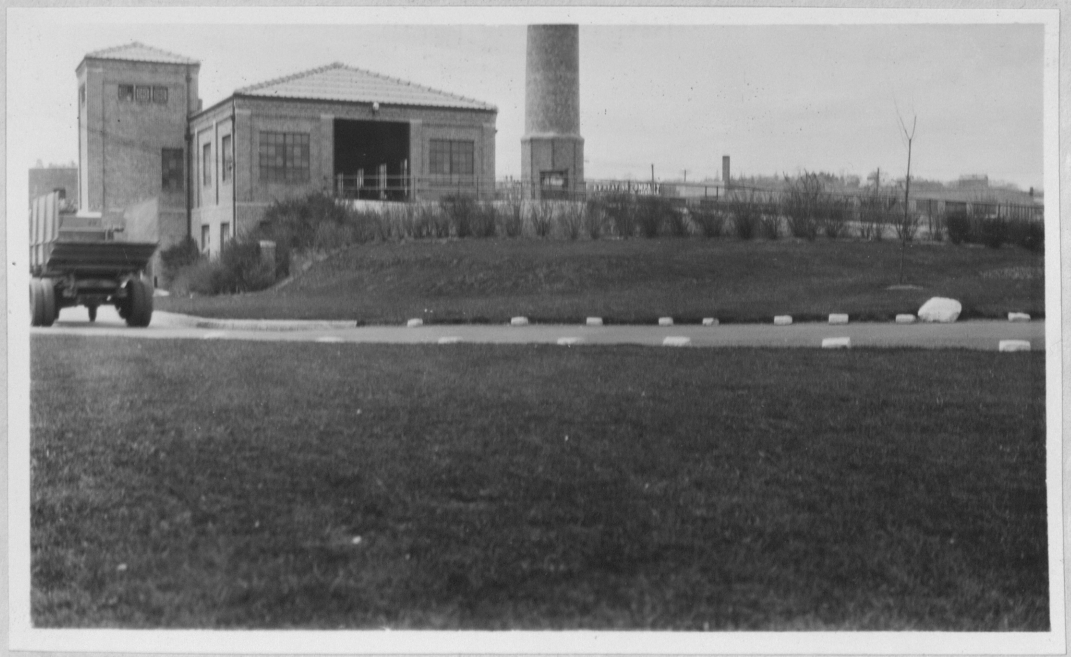
Westchester and its contiguous waters are in the metropolitan area where sewage wastes from New York City, Long Island, New Jersey, and the Hudson River population above combine to form a tremendous pollution load. Westchester, through the formation of the Westchester County Sanitary Sewer Commission in 1926, attacked the problem of sewage collection and disposal on a comprehensive basis. The sewer commission laid out projects covering almost the entire county in each of which trunk sewers, generally paralleling natural drainage, were planned to terminate in treatment plants located on the shore line and thence

discharging through long outfall sewers. Five of the seventeen proposed projects have been practically completed and three sewage treatment plants are in operation. These plants provide the minimum of treatment which consists of fine screening, with incineration of the screenings, and chlorination. This type of treatment combined with dilution secured by discharging into deep water is considered adequate until the population becomes considerably greater and also until a corresponding effort at sewage treatment is made by other areas contributing to the same waters. These plants are highly mechanized and are designed to operate without offense, although not isolated.

Recently there was formed the Tri-State Treaty Commission, composed of representatives from New York, New Jersey and Connecticut, for the purpose of securing cooperative action in the reduction of pollution in the metropolitan waters. This commission has prepared, for submission to the state legislatures, a tri-state treaty or compact which provides for a commission with authority to compel treatment of sewage and wastes discharged into the metropolitan waters. The compact also provides for the establishment of minimum standards of purity for these waters.

It is a function of the division of sanitation to anticipate the need of sewerage and sewage treatment in the various communities and through its director to take an active part in the promotion of such projects. Typical of this activity was the action of the county health department in overriding political animosities and compelling

Sewage Screening and Chlorination Plant at Mamaroneck, Constructed by the Westchester Sanitary Sewer Commission.



Garbage Incineration Plant at White Plains.

the village of Mamaroneck, in the summer of 1930, to use the new country trunk sewer outfall, extending two miles into Long Island Sound, for the discharge of the treatment plant effluent rather than the harbor waters where it caused a high degree of pollution on many bathing beaches.

The division has just initiated action which will compel the village of Port Chester and the city of New Rochelle to install equipment for the adequate chlorination of all sewage discharged during the approaching bathing season.

Another activity of the division of sanitation is that of cooperation with local officials in causing connections to be made to public sewers when such become available in areas where nuisances exist because of sewage overflows from private sewage disposal installations.

One of the principal duties of the division is the inspection of sewage disposal plants, particularly those which serve institutions, clubs, schools and industrial plants. These disposal works are frequently found to be without intelligent operation and in need of major or minor improvements. Employees in charge of these plants are advised in their work and action is compelled, where necessary, in the improvement of treatment facilities.

Lack of sanitary engineering supervision in the past has permitted very unsatisfactory conditions of sewage disposal to occur in many of the realty developments in the health district. Where speculative buildens have

erected dwellings and provided separate sewage disposal systems these have been inadequate generally and improperly constructed in many instances. The resulting overflows of sewage from these installations require much work on the part of the division in securing their correction. Advice of an engineering nature is given in assisting those responsible to abate such nuisances in a permanent and satisfactory manner.

To check the construction of inadequate or improperly designed private disposal installations, particularly in realty developments, regulations were included in the county sanitary code requiring permits from the department of health before their construction. Forms used for these applications and permits are shown on the three following pages. It has been found difficult to secure general compliance with these requirements except where local municipal officials have cooperated, but their enforcement in numerous scattered instances has resulted in a better understanding of the engineering features of these installations, and the division receives many requests for assistance in designing and laying out such systems. It is believed that, with the more general enforcement of this regulation, the occurrence of sewage overflows will be progressively reduced in the future.

IVISION of SANITATION
J. L. Barron, Director
R. M. McLaughlin
R. S. Taggart
Sanitary Inspectors

County of Westchester
Department of Health

MATTHIAS NICOLL, JR., M. D., COMMISSIONER
White Plains, N. Y.

File .....

Inspected .....By .....

Permit .....

APPLICATION
FOR SEWAGE DISPOSAL PERMIT

To the Commissioner of Health:

Sir:

Under the provisions of Section 8, Article II of the County Sanitary Code, application is hereby made for a permit to construct a sewage disposal system to serve the hereinafter described property, concerning which the following information is submitted:

1. Name of legally recorded owner.....

   Address .....

2. Location of property (Town or Village).....
   (Street)

   Name of realty development .....
   (Lot Nos.)

3. Ground area or lot dimensions per dwelling.....

4. Name and address of person or firm in local charge.....

.....

5. Approximate total number of people.....@ 75 gals./capita/day =.....gals. waste/day.....

6. Topography and nature of soil: absorption test.....minutes per inch drop;

   ground water.....feet below surface; clay, loam, sand, gravel; surface flat, sloping, steep.
   (Check terms that apply)

7. Absorption area required:..... ÷ ..... = ...sq. ft.
   Gals. waste per day (No. 5) Rate of absorption from table

8. Primary treatment, grease trap.....
   Material, Size

   Septic tank (material).....(dimensions) ..... (capacity).....

   Siphons .....

   Manholes .....

9. Secondary Treatment: (a).....feet absorption tile, ...inch diameter, in trench....."
   wide, x....." deep (av.), with gravel or broken stone....." below pipe to....."
   above pipe; (b) leaching pit.....with walls of....., ...ft. thick.
   Dimensions Material

   (c) describe other details, diversion gates, artificial filter, chlorination.....

.....

.....

10. State guarantee, if any.....

Signature .....

(By officer of sewage disposal firm if by contract, otherwise owner or builder.) Note: Any special or unusual conditions or considerations should be covered by letter or report accompanying application.

11. Sketch required on reverse side or on attached sheet showing plan with general relation of dwelling and property boundaries to system and arrangement of secondary treatment; also profile below plan showing cross section of tank and indicating hydraulic gradient, slopes and ground surface. Blue prints to scale are preferred and may be required.

DIVISION OF SANITATION
J. L. BARRON, *Director*
R. M. MCLAUGHLIN,
R. S. TAGGART,
Sanitary Inspectors

WESTCHESTER COUNTY DEPARTMENT OF HEALTH

White Plains, N. Y.

MATTHIAS NICOLL, JR., COMMISSIONER

APPLICATION

Water Supply For Sewage Disposal Permit

File.....

Inspected.....by.....

Permit.....

.....193...

To the Commissioner of Health:

Sir: Under the provisions of Article II of the County Sanitary Code, application is hereby made for a permit or permits as required in the development of the hereinafter described property, concerning which the following information is submitted:

GENERAL INFORMATION

1. Name of legally recorded owner.....

   Address .....

2. Location of property (Town or Village)..... (street).....

   .....

3. Name of property (if realty development).....

4. Name and address of person or firm in local charge.....

   .....

5. Number of dwellings to be served.....Lot Nos.....

6. Approximate total number of people.....

7. Ground area or lot dimensions per dwelling.....

WATER SUPPLY

(Information to be supplied if application is for permit to construct or provide water supply. Section 7, Art. II)

8. Source (location, physical features, yield).....

   .....

   .....

9. Manner of development (depth, diameter, casing, protecting structures, reservoirs, distribution system, pumps, capacities, and pressures).....

   .....

   .....

   .....

   .....

   .....

10. Sanitary condition (sources of pollution, analysis, methods of treatment).....

    .....

    .....

    .....

11. Operation (by whom operated and maintained, charges) .....

.....

SEWAGE DISPOSAL

(Information to be supplied if application is for permit to construct or provide sewage disposal system. Section 8, Art. II)

12. Estimated quantity of sewage, per capita..... Total.....

13. Topography and nature of soil (absorption tests, ground water elevation) .....

.....

.....

.....

14. Primary treatment (grease trap, septic tank, material, dimensions, capacity, siphons, manholes) .....

.....

.....

.....

.....

15. Secondary treatment (absorption tile, linear feet, slope, trench and rock dimensions; leaching pit, dimensions and absorption area; diversion gates, drainage, facilities, artificial filter, chlorination) .....

.....

.....

.....

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.....

16. Sketch (REQUIRED) on attached sheet showing plan with general relation of dwelling and property boundaries to system and arrangement of secondary treatment; also profile below plan showing cross-section of tank and indicating hydraulic gradient, slopes, and ground surface. Blue prints to scale are preferred and may be required.)

17. State guarantee, if any.....

.....

Signature .....

(By officer of sewage disposal firm if by contract, otherwise owner or builder). Note: Any special or unusual conditions or considerations should be covered by letter or report accompanying application.

WESTCHESTER COUNTY DEPARTMENT OF HEALTH

WHITE PLAINS, N. Y.

MATTHIAS NICOLL, JR., *Commissioner*

PERMIT

TO PROVIDE A WATER SUPPLY OR SEWAGE DISPOSAL SYSTEM

Application having been duly made to the County Commissioner of Health as required by Article II of the Westchester County Sanitary Code, permission is hereby given to .....

for the construction or provision of.....

.....

to serve .....

.....

.....

subject to the following conditions:

Date:

.....

Commissioner

Chapter V

SWIMMING POOLS

The New York state sanitary code requires that local health officers shall issue permits for the operation of all swimming pools except those which are privately owned and used. The health district has forty-seven artificial swimming pools, none of which had received the required permit, nor were under any particular supervision on the part of public health authority prior to the formation of the county unit. One of the first regulations adopted by the Westchester County Board of Health required the submission of monthly reports of daily operation from swimming pools within the health district.

In the course of investigation of these pools it was found that practically none of the operators had any technical training and that they were largely unacquainted with the treatment processes which they were using, or should have been using, for purifying the pool waters. One sanitary inspector was assigned to the inspection of swimming pools. Much time was devoted to the instruction of the pool operators and to the correction and improvement of the processes of mechanical and chemical treatment, particularly the use of alum and of chlorine and the maintenance of the pool waters in an alkaline condition. Applications were secured from the pool owners or managers

and, as each pool was improved sufficiently in operation and equipment, the required permit was issued.

In Table No. IV are shown the artificial indoor and outdoor pools under permit and also those for which applications are pending or which are under observation. Data are also included in this table on the volume and on the type of treatment. On page 48 is shown the swimming pool operation report form which is submitted to the division of sanitation monthly from each pool in use.

The standards for bacteriological purity of swimming pool water as prescribed by the state sanitary code were found to be too low to serve as an effective requirement in the health district. Consequently, in the sanitary code adopted in the health district (see page 86) standards were prescribed similar to the recommended minimum standards prepared by the Conference of State Sanitary Engineers and the American Public Health Association. It has been necessary to examine series of samples collected from certain of the pools in order to establish evidence of their unsatisfactory condition before requiring essential improvements. Many of the pools are now using pH control to eliminate the irritating effect of acid water which is so often attributed to the presence of chlorine. The maintenance of pool waters in a definitely alkaline condition also has been found to improve chlorination and decrease its cost because of the increased stability of the residual chlorine content. Calcium hypochlorite, containing about 65%

Table No. IV

SWIMMING POOLS
WESTCHESTER COUNTY HEALTH DISTRICT

ARTIFICIAL INDOOR POOLS UNDER PERMIT

Name	Source of Water	Volume	Treatment
Ardsley Club	Irvington-Public	15,000	F&D, Cl
Beach Point Club	Westchester Joint Water Works #1	55,000	Recir, PMF, Cl
Briarcliff Lodge	Briarcliff Manor Public	116,000	F&D, Cl
Grasslands Hospital	New York City	60,000	Recir. RSF, Cl
Hackley School	Tarrytown-Public	45,000	F&D, Cl
Hommocks Country Club	Long Island Sound	90,000	Recir. PMF, Cl
Marymount School	Tarrytown-Public	25,000	Recir. RSF, Cl
Mrs. Dow's School	Briarcliff Manor-Public	65,000	Recir. RSF, Cl
Peekskill High School	Peekskill-Public	50,000	Recir. PMF, Cl
Peekskill Military Academy	Peekskill-Public	60,000	Recir. PMF, Cl
Westchester Country Club	Westchester Joint Water Works #1	55,000	Recir. PMF, Cl
Y.M.C.A.-Tarrytown	Tarrytown-Public	40,000	Recir. RSF, Cl
Y.M.C.A.-White Plains	Wells	55,000	Recir. PMF, Cl

Note: F&D = Fill and Draw type; Cl = Chlorination; PMF = Pressure mechanical filtration; Recir = Recirculation; RSF = Rapid sand filtration; FT = Flow through type; Aer = Aeration; Oz = Ozonization; Volume is in gallons. Data as of December 31, 1931.

Table No. IV (Continued)

ARTIFICIAL OUTDOOR POOLS UNDER PERMIT

Name	Source of Water	Volume	Treatment
Briarcliff Lodge	Springs and well	5,250,000	FT, Cl
Briarcliff Manor	Briarcliff Manor-Public	310,000	Recir.PMF, Cl
Camp Ar'sley	New Rochelle Water Company	25,000	Recir, sand bed, Aer, Cl
Century Country Club	Wells	150,000	Recir,PMF, Cl
Country Club Beach	Long Island Sound	100,000	Recir,RSF, Cl
Elmsford Country Club	Fairview Water District	180,000	Recir,PMF, Cl
Fairview Country Club	Knollwood Water District	80,000	Recir,PMF, Cl
Fenimore Country Club	New Rochelle Water Company	170,000	Recir,PMF, Cl
Florence Nightingale School	Katonah Water District	45,000	F&D, Cl
Hudson River Day Line	Lake	500,000	Recir,PMF, Cl
J. P. Magner	Long Island Sound	725,000	FT,PMF,Cl
Manursing Island Club	Long Island Sound	270,000	Recir,RSF, Cl
Metropolis Country Club	Fairview Water District	165,000	Recir,PMF, Cl
North Castle Country Club	Wells	110,000	Recir,RSF, Cl
Purchase Country Club	Well	160,000	Recir,PMF, Cl
Racquet and Swimming Club	Irvington-Public	175,000	Recir,PMF, Cl
St. Joseph's Home	Peekskill-Public and Hudson River	220,000	Recir,PMF, Cl

Table No. IV (Continued)

Name	Source of Water	Volume	Treatment
Sleepy Hollow Country Club	Well	135,000	Recir,PMF, Cl
Sleepy Hollow Manor Club	North Tarrytown-Public	150,000	Recir,RSF, Cl
Valeria Home	Peekskill-Public	120,000	Recir,PMF, Cl
Westchester Country Club	Long Island Sound	650,000	Recir,PMF, Cl

ARTIFICIAL POOLS - PERMITS WITHHELD PENDING COMPLIANCE WITH THE SANITARY CODE

Mason School, Tarrytown, Indoor

Westchester Military Academy, Peekskill, Indoor

Dr. Glueck Sanatorium, Ossining, Outdoor

Fresh Air Camp, Greenburgh, Outdoor

Griswold Park, Ossining, Outdoor

Larchmont Yacht Club, Larchmont, Outdoor

Lincoln Agricultural School, Lincolndale, Outdoor

Playland, Rye, Outdoor

Ray Hill Camp, Mt. Kisco, Outdoor

Rye Country Club, Rye, Outdoor

St. Andrews Golf Club, Hastings, Outdoor

Chilmark Park, Ossining, Outdoor

SEMI-ARTIFICIAL OUTDOOR POOLS UNDER OBSERVATION

Brace Memorial Farm, Valhalla

Brookwood, Inc., Katonah

Lake Katonah, Goldens Bridge

Pine Lake Park, Oscawana

Westminster Lake, White Plains

Girl Scout Camp, Briarcliff Manor

To Westchester County Department of Health

White Plains, N. Y.

Month _____ 19 _____

Location _____ Owner _____ Operator _____

Days	Bathers		New Water Added	Hours Pump and Filters Operated	Filters Washed	Pool Cleaned	STERILIZATION					CHEMICALS		Alkalinity or pH Value	Remarks
	Adult	Child					Time Applied	Rate or Dose	Residual * 1	2	3	Alum lbs.	Alkali lbs.		
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
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30															
31															

*0. 2 p. p. m. minimum requirement when pool is in use. "Recirculation" pools require all above information. "Fill and Draw" and "Flow Through" pools do not require columns 4, 5, 8, and 9. Make all entries daily when pool is in use. Send the original copy to the Westchester County Department of Health on the first of each succeeding month.

Beach at Playland, Rye

Salt Water Swimming Pool at Playland,
Operated by the Westchester Park Commission

available chlorine, has been used extensively by the pool operators, either for emergency sterilization or to supplement the usual application of liquid chlorine where distribution of the recirculating water is unsatisfactory. Attention has been given to the control and prevention of foot infections and a general improvement in shower and dressing room sanitation has been effected.

The division of sanitation has re-designed the distribution piping for a number of the pools and assisted in the complete reconstruction of one large pool. The largest commercial salt water pool in the health district, which had not previously provided sterilization, was compelled to install chlorination equipment with results which proved to be entirely satisfactory, much to the surprise of the pool owner. During 1931 the division made 304 inspections of swimming pools in addition to checking and acknowledging with comment each operating report submitted.

The sanitary condition of the bathing beaches is bound up with the problem of sewage disposal. The high degree of pollution previously existing in the Long Island Sound waters has been considerably relieved by recent improvements in sewage disposal and the provision of adequate chlorination at New Rochelle and Port Chester, now being forced by the county health department, will result in a further major improvement in these waters. In spite of the fact that the Hudson River is heavily polluted, many of its beaches in the more favorable locations are used

by great numbers of people. It is remarkable that there has been practically no incidence of typhoid fever attributable to the bathing in the Hudson, although skin infections do occasionally occur. The health department is constantly besieged during the bathing season with requests for information concerning the safety of these bathing beaches. In refusing to take any action in closing these beaches, the department has held that the great recreational benefits afforded large numbers of people outweigh the observed or potential dangers to health.

Chapter VI

THE MILK SUPPLY

Since Westchester is a part of the metropolitan area, its milk supply is necessarily secured from the extensive milk shed tributary to New York City. Milk distributed by the large dealers is purchased through receiving stations in all parts of New York state, in Vermont, Connecticut, Massachusetts, Pennsylvania, and New Jersey. Some of these dealers sell their products under many health jurisdictions. Until the establishment of milk supervision by the division of sanitation for the Westchester County health district, the health department of New York City was the only agency carrying on regular field inspection and general supervision of all of its tributary milk sources. In so far as milk sold in Westchester County was concerned, it was soon discovered that many of its sources were not subject to the rigid inspections of the New York City health department and that sources excluded as unsatisfactory by New York City were, in some instances, diverted to Westchester County.

Preliminary surveys by the director of the division showed that, although the responsibility for milk sanitation had previously rested with some thirty-three local health officers in the health district, this supervision was in no instance satisfactory or adequate and, as a matter of fact, no health officer actually knew where

all of the milk supply originated which was sold in his territory. A considerable volume of milk was being sold by dealers not under permit and without any supervision and it was also discovered that raw milk from dairy herds not tuberculin tested was being sold by a number of dealers. Many of the municipalities had retained a private laboratory which employed several inspectors to collect samples and do a limited amount of dairy inspection. This service was entirely inadequate to cover the various milk supplies and the unofficial status of the inspectors made effective enforcement of the sanitary code impossible. Although the state department of health took some responsibility for inspection of pasteurizing plants, it was unable to secure effective cooperation from local health officers which was needed to secure results from the infrequent state inspections.

Certain principles of procedure were followed in establishing milk supervision on a county health district basis. The work of inspections, the maintenance of records, and the issuance of permits were centralized in the division of sanitation. Responsibility for securing information concerning every milk source was assumed by the division without dependence on the inspections or certifications of other health departments. A maximum of responsibility for sanitation of dairy farms was placed upon the dealers and a system of inspection developed so as to secure a maximum of sanitary control with a minimum of personnel.

Requirements of the state and county sanitary codes relating to milk and cream were applied to every dealer alike.

To make this procedure effective, it was necessary to supplement the general requirements of Chapter III of the state sanitary code relating to milk and cream by local regulations adapted to the peculiar circumstances of Westchester County and these were included as an article in the Westchester County sanitary code. (See page 85). These requirements may be summarized briefly as follows:

1. Use of fore milk strip cup required at dairies producing Grade A raw milk.
2. Bottling of raw milk prohibited in pasteurizing plants.
3. Inspection of all dairies and proper filing of reports required.
4. Annual physical examination of all dairy animals and the proper filing of certificates required.
5. Special requirements prescribed for the examination of cattle dealers' herds.
6. Quarterly bacterial counts on the milk from every dairy required.
7. Dealer's name required on milk vehicles.
8. Keeping of milk and cream caps prohibited at distributing stations.
9. Requirements made concerning the removal of milk bottles from places where certain communicable diseases exist.

On the effective date of these regulations, May 1, 1931, the division took over the entire supervision of milk supplies and the collection of milk samples throughout the health district. During the remainder of the year 2,582 milk and cream samples were collected and examined. In addition, a total of 13,863 bacteria counts

were made by the milk dealers for individual dairies supplying milk for pasteurization and the results were submitted to the division. Dairy plants requiring inspection, as of December 1, 1931, are listed as follows:

Tributary shipping stations	92
Tributary pasteurization plants (16 within the health district)	72
Raw milk bottling plants	41
Raw milk producers	47
Distributing stations	62

These plants and stations were all inspected by representatives of the division, requiring travel as far north as the Canadian border and into four adjoining states. During the year 124 permits were issued to milk and cream dealers.

The companies receiving milk from dairy farms at shipping stations or pasteurizing plants are made responsible for the inspection of these dairies and the maintenance of inspection reports on forms prescribed by the division of sanitation. Certificates of veterinary examination of these dairy herds must be kept on file. When an inspector of the division goes to a shipping station, he checks all of the reports on file and may select a small number of dairies for field inspection in company with an inspector of the milk company to determine whether inspections are accurate and violations of the sanitary code are being corrected. These dairy inspections, in combination with bacteria counts on each producer's milk submitted

quarterly to the division, provide an adequate basis for sanitary control of the dairy farms producing for pasteurization.

Pasteurizing plants not covered by the New York City Health Department are inspected at least monthly, if possible. Otherwise, the inspection routine provides for semi-annual inspection of pasteurizing plants and shipping stations. The division makes direct inspections of all raw milk sources at least monthly and careful supervision is maintained, particularly as to the physical condition of the dairy herds and as to cooling and bottling methods. Distributing stations are inspected frequently in the course of milk sample collection. The routine of milk sample collection requires that an inspector begin his work at about 4:30 A.M. since these samples are taken from the route wagons. About twenty-five milk and cream samples may be collected in a morning, this number usually being sufficient to cover all of the dealers and the grades of milk and cream sold in a community. The samples are extracted from the bottles by means of sterile pipettes and placed in sterile tubes carried in a special milk sample case containing ice. Temperature determinations are made on each bottle after sampling. The bacteria counts on each dealer's milk are reported direct to the dealer and not published in any form, since the general public is not capable of making a rational interpretation of milk bacteria counts. The various forms used in the milk control work are shown at the end of this chapter.

Hearings on violations of the sanitary code are held, as necessary, before the commissioner. These, together with the threat of suspension of permits, are generally sufficient to effect improvement or secure compliance with the code. In enforcing milk sanitation requirements, the health authority has a tremendous weapon in the adverse economic effect on the dealer of any unfavorable public health action against his milk supply. Consequently, such action must be thoroughly justified and used with the utmost discretion.

Mass data resulting from the examination of milk and cream samples collected by the division, as summarized below, indicate the initial condition of the milk supplies under the centralized supervision of the health department. These initial results showed room for considerable improvement. They are based on a total of 2,304 milk and cream samples examined and 1,795 bottle temperatures determined.

Grade A Raw (475 samples)

Bacteria per cc:
- Under 10,000.....51%
- 10,000 to 30,000.....23%
- Over 30,000 (code limit).....26%

Grade A Pasteurized (645 samples)

Bacteria per cc:
- Under 10,000.....66%
- 10,000 to 30,000.....24%
- Over 30,000 (code limit).....10%

Grade B Pasteurized (699 samples)

Bacteria per cc:
- Under 10,000.....52%
- 10,000 to 50,000.....37%
- Over 50,000 (code limit).....11%

Raw Cream (109 samples)

Bacteria per cc:
Under 200,000 (code limit).....66%
Over 200,000.....34%

Pasteurized Cream (376 samples)

Bacteria per cc:
Under 500,000 (code limit).....75%
Over 500,000.....25%

Bottle Temperatures (1795 determinations)

Under 50°F.....70%
Over 50°F.....30%

It will be noted that the percentages of satisfactory samples of Grade A Pasteurized and Grade B Pasteurized milk are approximately the same, taking into account the difference in bacteria counts permitted by the sanitary code. The Grade A Raw milk has a much less satisfactory record. The examinations of cream samples showed a very unsatisfactory condition which was to be expected, however, in view of the fact that there had been very little public health supervision of the cream supplies prior to May 1, 1931. The relation between high temperatures and high bacteria counts is frequently apparent and the division has emphasized the necessity for the liberal use of ice on all milk delivery wagons. It should be pointed out that a few milk dealers have been responsible for a considerable number of the high bacteria counts indicated in the percentages above and that these dealers, in some instances, have been compelled to discontinue business or secure other milk supplies of satisfactory quality.

Four surveys of daily milk and cream consumption have been made, the results of which are tabulated as follows:

Daily Average in Quarts	*Aug. 1930	Dec. 1930	Aug. 1931	Dec. 1931
Total of all milk sold	99,224	104,752	128,676	116,451
Total of pasteurized cream		6,202	5,644	4,268
Total of raw cream		201	135	108
Total of all cream sold	4,751	6,403	5,779	4,376
Per cent of certified milk	1.5	1.2	0.8	0.6
Per cent of A pasteurized milk	26.5	28.6	26.5	29.9
Per cent of A raw milk	8.7	8.3	6.0	5.9
Per cent of B pasteurized milk	63.3	61.9	66.7	63.6
Per cent of pasteurized milk	89.8	90.5	93.2	93.5
Per cent of raw milk	10.2	9.5	6.8	6.5
Per capita consumption in quarts	.412	.397	.487	.44

*White Plains not included.

There is a considerable volume of milk produced on estates and farms and not offered for sale which, if included in the above totals, would increase considerably

the figures for per capita consumption. The most significant tendency shown by the milk surveys is in the increasing consumption of pasteurized milk and the corresponding decrease in consumption of raw milk. Peekskill and Mt. Kisco are the principal raw milk communities. Ossining and the Tarrytowns were recently added to the municipalities having ordinances prohibiting raw milk, except certified. The division has actively promoted the adoption of such ordinances in the various communities, since it is not yet practicable to prohibit raw milk generally throughout the health district. A number of hospitals and schools have been caused to change from raw to pasteurized milk as the result of checking institutional milk supplies. Special effort has been made to determine sources of undulant fever in cases occurring in the health district and a number of animals have been removed from certain dairy herds as a result of blood tests made by the division veterinarian.

One of the major activities of the division has been the eradication of bovine tuberculosis in cooperation with the State Department of Agriculture and Markets and the United States Department of Agriculture. Up to December 31, 1931, the veterinarian of the division had tuberculin tested 359 herds and the total number of official initial tests and retests made by him and by other veterinairans in the county was 4,345. From this number of tests 1,315 cattle were found to be reactors and were condemned and destroyed according to the routine established

by the New York State Department of Agriculture and Markets. Of the cattle initially tested 48.5% were found to be reactors. Figures furnished by the United States Department of Agriculture, computed on the basis of 1,156 reactors condemned in Westchester, show for 1931 the amounts involved in indemnities and the average per animal.

Total appraisal	$94,674.00	Average per reactor	$81.89
Salvage	24,597.42	Average per reactor	21.27
State indemnity	53,884.61	Average per reactor	46.61
Federal indemnity	16,062.86	Average per reactor	13.89
Difference	130.11	Average per reactor	.12

These figures may be compared with the average appraisal of $77.74 for 63,104 animals condemned in New York state during 1931, made up of $15.48 salvage, $11.19 federal, and $51.03 state indemnity. It is estimated that about two-thirds of the reactors have been removed from Westchester and that the initial testing and retesting can be completed during 1932.

County of Westchester

Department of Health

MATTHIAS NICOLL, JR., M. D., COMMISSIONER

White Plains, N. Y.

For Grade.....

DAIRY REPORT

Inspection No.....Time.....A. P. M. Date ....., 19....

Dairyman ..... Owner .....

Address ..... Address .....

Party interviewed..... Delivers at.....

Operated by.....

1 No. of cattle.....No. milking.....Milk produced daily.....Quarts

2 (a) Cattle were.....tuberculin tested by a licensed veterinarian on.....Report filed.....

(b) Cattle were.....physically examined by a licensed veterinarian on.....Report filed.....

3 All persons engaged in producing or handling the milk, also all persons in their households, are.....free from listed diseases (Tuberculosis, typhoid fever, scarlet fever, septic sore throat, diphtheria, poliomyelitis, dysentery.)

4 Date and nature of last case.....

5 Water supply for utensils is from a.....located.....feet deep and is.....apparently pure and wholesome.

6 State any possible contamination located within 200 feet of source of water and note if not protected against surface drainage

.....

7 (a) Privy is.....clean. (b) Vault is.....tight. (c) Seats have.....self-closing lids, or door is.....self-closing. (d) Privy is..... screened against flies.

	Yes	No
COWS		
8 Are apparently healthy and in good condition		
9 Flanks, udders, and teats are clean at milking time		
Note: Udders and teats should be washed, or should be wiped with a clean damp cloth before milking.		
COW STABLE		
10 Is adequately lighted		
11 Is adequately ventilated		
12 Floors are—		
(a) tight and capable of being kept clean		
(b) clean		
(c) in good repair		
13 Manure removed daily from barn and so disposed of that cows cannot get at it		
14 Drops are—		
(a) watertight and capable of being kept clean		
(b) clean		
(c) in good repair		
15 Walls and ceiling are—		
(a) dust proof		
(b) clean and free from dust and cobwebs		
16 Cow yard is properly—		
(a) graded		
(b) drained		
UTENSILS		
17 Milks pails are—		
(a) of smooth metal with inside seams soldered flush		
(b) in good repair and free from pronounced dents and rust spots		
18 Milk cans and covers are—		
(a) of smooth metal with inside seams soldered flush		
(b) in good repair and free from pronounced dents and rust spots		
19 Strainers are in good repair		
20 Racks are provided, in a clean place, to hold cans, pails and strainers when not in use		
21 Utensils are—		
(a) rinsed with clean water promptly after use		
(b) scrubbed with brush and an alkaline solution		
(c) rinsed with clean water		
(d) sterilized with steam, or water over 180o F., or proper chlorine solution		

	Yes	No
UTENSILS — Continued		
(e) stored in an inverted position, so protected as to prevent contamination		
Note: Utensils should not be used for any other purpose than the care and handling of milk.		
22 Milking machines are—		
(a) of sanitary construction and can readily be taken apart		
(b) brushed, washed and rinsed with water after each milking		
(c) sterilized with steam or water at a temperature over 180° F. or proper chlorine solution after each milking		
(d) kept in a clean sanitary condition when not in use		
MILKING		
23 Hands of milkers are kept clean and dry during milking		
24 Milk is removed from stable as soon as pail is filled		
25 Milk is immediately strained in milk house or milk room		
26 Milking stools are clean		
27 Outer clothing of milker is clean		
COOLING		
28 Cooling tanks are of cement, metal or wood, having capacity for milk cans and depth to bring water to necks of can		
29 Night's milk is cooled within one hour to and maintained at—		
(a) 50° Fahrenheit (Grade A)		
(b) 60° Fahrenheit (Grade B)		
30 Morning's milk is properly cooled or delivered to milk station—		
(a) before 8 A. M. (Grade A)		
(b) before 9 A. M. (Grade B)		
31 Milk house or milk room provided—		
(a) with sufficient light		
(b) with sufficient venilation		
(c) with proper screens to exclude flies		
(d) with properly graded and watertight floor		
(e) and kept clean		
(f) and water in vat kept fresh and clean		
(g) and does not open directly into stable or room used for domestic purposes		
(h) and used exclusively for handling milk and milking utensils		

REMARKS .....

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Inspector

Shipping Station or Pasteurizing Plant at.....

To the WESTCHESTER COUNTY DEPARTMENT OF HEALTH

White Plains, N. Y.

Veterinarian's Certificate

I HEREBY CERTIFY that I am a duly licensed Veterinarian of the State of..... and that on the.....day of.....19...., I made a physical examination of.....animals comprising the dairy herd (including Bulls and Heifers which may possibly freshen within one year from date) on the farm at..... owned by.....and tenanted by.....

This examination showed these animals to be in healthy condition, and in my opinion free from any and all diseases and defects, except as herein indicated, as far as can be determined by physical examination. Exceptions are numbered and described on reverse side of this certificate. (Veterinarian must state in each instance if milk from defective cows may be safely used for human consumption.)

Signed .....
Veterinarian.

Address .....

Graduate of.....

Registered at.....

The following statement must be signed, in the presence of examining Veterinarian, by resident or tenant on farm or a responsible member of his household:

I hereby state that the entire dairy herd on farm referred to above, consists of.....cows and..... Bull....and.....Heifers which may possibly freshen within one year from date.

I agree to comply with instructions, printed on reverse side of this certificate, with regard to segregation and removal of defective, unsound and diseased animals.

Signed.....

Date..... [OVER] Per.....

Certificates must be filed at Plant or Creamery to which milk is delivered within twenty-four (24) hours after examination is made

Instructions to Dairymen, Plant and Creamery Managers and Veterinarians Regarding Segregation and Removal of "Exceptions," "Defective," "Unsound" and "Diseased" Cows

When physical examination of a dairy is made, veterinarian must state, in case of "exceptions" or "defective" cows, whether or not, in his opinion, milk may safely be used for human consumption. If veterinarian decides, and states on certificate that milk may safely be so used, cows need not be segregated. (This refers particularly to three-teated cows where no inflammation is present.) If veterinarian decides, and so states on certificate, that defect or disease is of such nature that recovery within a few weeks seems reasonably certain, it will not be necessary to remove defective animals from dairy farm, but they must be segregated, and milk not included in delivery to any plant or creamery making shipments, directly or indirectly, to Westchester County Health District, until upon re-examination, veterinarian finds animals entirely recovered, and issues a certificate to that effect. If, however, animals are found "unsound" or "diseased" and their quick recovery to health improbable, they must be segregated immediately from milking herd, and milk excluded from delivery to any plant or creamery. Such "unsound" or "diseased" animals must be removed from dairy farm within fourteen (14) days after veterinarian's examination. Statement, signed by dairyman, indicating "disposition of unsound animals" must be filed at the plant to which milk is delivered within twenty-four (24) hours after physical examination. Where animals are merely segregated, such segregation must at that time be indicated in signed statement above referred to. When defective or diseased animals are finally removed from farm, statement filed at plant or creamery must indicate whether animals have been slaughtered or sold, and if sold, name, address and business or occupation of buyer must be indicated. All certificates of physical examinations of dairy cattle must be filed at plant or creamery to which milk is delivered, within twenty-four (24) hours after examination.

EXCEPTIONS NOTED UNDER PHYSICAL EXAMINATION

No.	Description	Temp.	Resp.	Pulse	Auscultation of Lungs	Percussion on Chest	Condition of Udder and Teats	Condition Indicates

[OVER]

WESTCHESTER COUNTY DEPARTMENT OF HEALTH

WHITE PLAINS, N. Y.

Segregation Statement

TO BE FILLED OUT AT TIME OF VETERINARIAN'S EXAMINATION AND FILED WITH VETERINARIAN'S CERTIFICATE

Branch ..... Date .....

Dairy of .....

No. Animals Rejected..... Segregated for Treatment.....

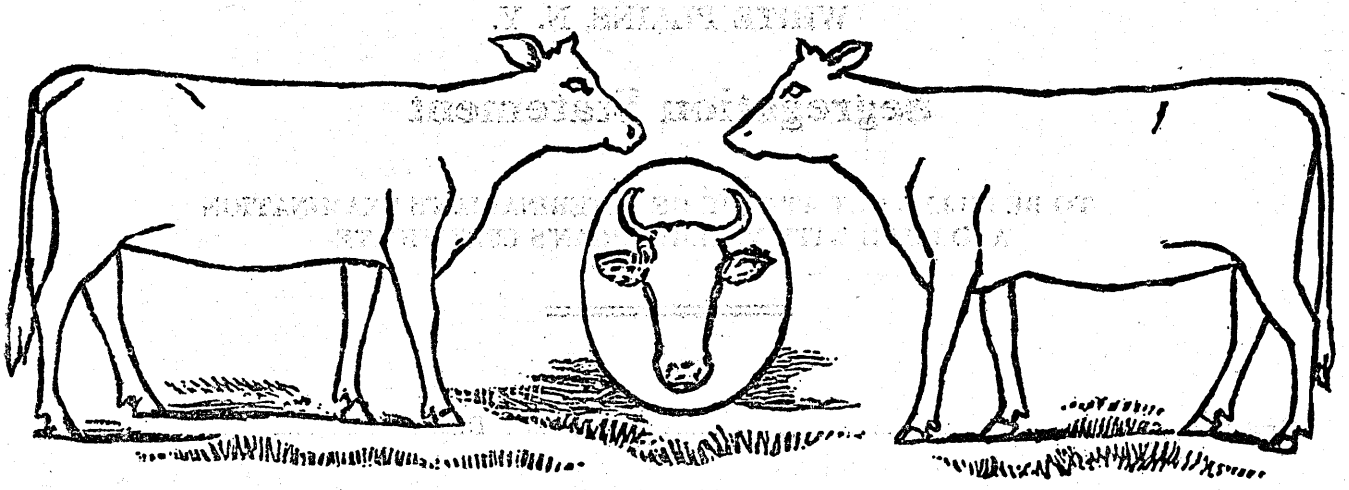
..... Veterinarian

That is to certify that the..... animal noted above has been segregated as required by the Westchester County Department of Health Regulations and that the milk from said animal will not be included with the rest of the product delivered from my dairy to any plant making shipments to Westchester County. In cases of animals segregated for treatment I will have these animals re-examined within fourteen days from date of isolation by an approved veterinarian and file a statement at the plant of the findings of this examination.

..... Dairyman

(Identification of animals on reverse side)

No. ..... (Same as on back of Vet. cert.)



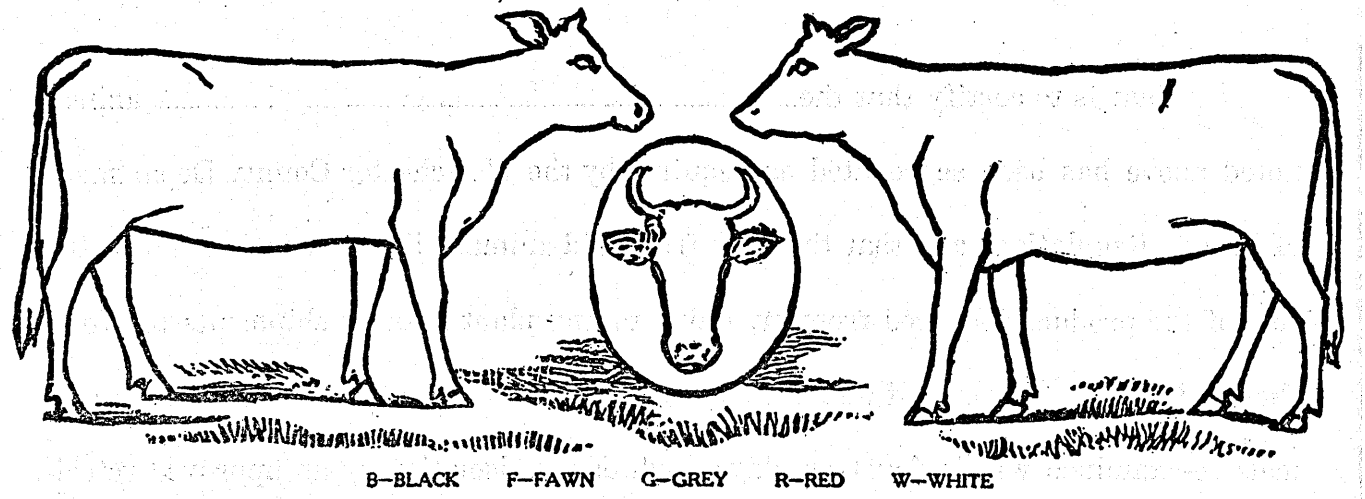
B—BLACK F—FAWN G—GREY R—RED W—WHITE

Ear Tag No. ..... Breed ..... Age .....

Special Markings .....

Nature of Unsoundness .....

No. ..... (Same as on back of Vet. cert.)



B—BLACK F—FAWN G—GREY R—RED W—WHITE

Ear Tag No. ..... Breed ..... Age .....

Special Markings .....

Nature of Unsoundness .....

WESTCHESTER COUNTY DEPARTMENT OF HEALTH

WHITE PLAINS, N. Y.

MATTHIAS NICOLL, JR., *Commissioner*

Dairyman's Statement of Disposal

This is to certify that the..... animals rejected by Dr..... on certificate of examination of my dairy on..... 193..... have been disposed of as follows.....

Sold to .....

Business of Purchaser.....

Address of Purchaser.....

Date of Disposal.....

..... Dairyman

Veterinarian's Statememt of Re-examination

This is to certify that on this..... day of .....193.....I examined the animals in herd of ..... isolated on..... 193..... by Dr..... due to condition .....

.....and find said animals are .....recovered and milk is.....fit for human consumption.

..... Veterinarian

County of Westchester

DEPARTMENT OF HEALTH

MATTHIAS NICOLL, JR., M.D., COMMISSIONER

WHITE PLAINS, N. Y.

SHIPPING STATION (RAW) INSPECTION REPORT

Plant operated by ..... Owner .....

Address ..... City, Town, Village of .....

Date of inspection ..... Inspected by .....

Accompanied by ..... Plant tributary to .....

About ..... quarts of milk are received daily from ..... dairies.

..... quarts of milk are shipped as Grade A.

..... quarts of milk are shipped as Grade B.

..... quarts of milk are separated daily for cream.

Note:—The following questions are so worded that compliance with the Code is always indicated by an affirmative answer.

	BUILDINGS AND FACILITIES	Yes	No
1	Rooms or buildings:		
	(a) are well lighted		
	(b) are well ventilated		
	(c) are kept clean		
	(d) are free from flies		
2	Milk handling rooms are separated from stables or living quarters		
3	A separate room is provided for washing containers		
4	Doors of milk handling rooms are self-closing		
5	Floors:		
	(a) are watertight		
	(b) are well drained		
	(c) have drainage properly disposed of		
6	Walls and ceiling of milk handling room:		
	(a) are tight		
	(b) are not readily affected by steam		
7	A flush closet or privy:		
	(a) is provided		
	(b) is satisfactory		
8	Lavatory facilities are provided		
	(a) including running water		
	(b) including soap		
	(c) including individual sanitary towels		
	(d) and are conveniently located		
9	Water supply potable and ample		
10	Water analyzed (Date ..... Result .....)		
11	Separate milk receiving room provided		
12	Surrounding premises clean		
	APPARATUS		
13	Weigh cans, mixing vats, storage vats, pumps, pipes and other apparatus of sanitary construction		
14	Surface coolers:		
	(a) are free from leaks		
	(b) provided with suitable covers or are well protected in a room used for no other purpose		
15	Internal coolers:		
	(a) are free from leaks		
	(b) heads of sanitary construction		
	OPERATION		
16	Containers and utensils:		
	(a) are cleaned		
	(b) are sterilized with either		
	(1) steam		
	(2) hot water at 180°F.		
	(3) hot caustic solution		
	(4) (a) chlorine solution		
	(b) and equipment and materials are available and used for making residual chlorine tests		
17	Tanks, pipes, pumps and other equipment		
	(a) are cleaned after each day's run		
	(b) pipes and parts are suitably stored		
	(c) are sterilized just prior to use		
18	Milk properly strained as received		
19	Sediment tester:		
	(a) is provided		
	(b) is used		
20	No milk received from cattle dealers		
	(a) if so, proper individual charts on file		
21	No milk accepted if excluded from other plants		
22	Cooling:		
	(a) Grade A nights rec'd below 50°F.		
	(b) Grade A mornings rec'd before 8 A. M.		
	(c) Grade B nights rec'd below 60°F.		
	(d) Grade B mornings rec'd before 9 A. M.		
23	Annual physical examination of employees made and cards filed		
24	Dairy inspection reports filed at plant		
25	Veterinarian examination certificates filed at plant		
26	Segregation-disposal certificates for defective cows filed at plant		
27	Duplicate copies of department inspection reports kept on file in consecutive order		

REMARKS: .....

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Inspector

1-2-31-5000 (17-4404)

NEW YORK STATE DEPARTMENT OF HEALTH—BUREAU OF MILK SANITATION

MILK PASTEURIZING PLANT REPORT

Plant operated by.....Owner.....

Address.....City, Town, Village of.....

Date of inspection.....Inspected by.....

Accompanied by.....

NOTE.— The following questions are so worded that compliance with the Code is always indicated by an affirmative answer.

	BUILDINGS AND FACILITIES	Yes	No
1	Rooms or buildings:		
	(a) are well lighted C.16		
	(b) are well ventilated C.16		
	(c) are kept clean C.16		
	(d) are free from flies C.16		
2	Milk handling rooms are separated from stables or living quarters R.1		
3	A separate room is provided for washing containers R.1		
4	Cans of raw milk are not unloaded directly into pasteurizing room R.1		
5	Doors of milk handling rooms are self-closing R.1		
6	Floors:		
	(a) are watertight C.16		
	(b) are well drained C.16		
	(c) have drainage properly disposed of C.16		
7	Walls and ceiling of milk handling rooms:		
	(a) are tight R.1		
	(b) are not readily affected by steam R.1		
8	A flush closet or privy:		
	(a) is provided R.1		
	(b) is satisfactory R.1		
9	Lavatory facilities are provided R.1		
	(a) including running water R.1		
	(b) including soap R.1		
	(c) including individual sanitary towels R.1		
	(d) and are conveniently located R.1		
10	Water for cooling is from a potable supply R.6		
	APPARATUS		
11	Pasteurizing apparatus:		
	(a) is protected against the leakage of raw milk into the holder during holding and emptying periods R.2		
	(b) is equipped with either		
	(1) simple flush valve with outlet R.2		
	(*a*) disconnected during filling, heating and holding periods R.2		
	(*b*) pipes supported off the floor R.2		
	(*c*) rinsed and steamed just prior to emptying holder R.2		
	(*d*) and not connected to a common outlet R.2		
	or (2) flush leak protector outlet valve R.2 or close coupled outlet valve R.2.		
	(*a*) with a steam connection R.2.		
	(*b*) and with steam applied during pasteurization R.2		
	(c) had milk surface free from foam R.2		
	(d) if of continuous flow type is equipped with a pump having a maximum capacity not greater than the rated capacity of the pasteurizer R.2		
	(e) if of automatic type is properly timed R.2		
	(f) is provided with suitable covers R.10		
	(g) had covers closed during pasteurization R.10		
12	Automatic temperature control is provided and used if milk is preheated to 143° F. C.20		
13	Indicating thermometers: (Number.....)		
	(a) are provided and installed in each holder C.20		
	or at heaters if milk is preheated to 143° F. C.20		
	(b) are liquid filled stem or angle type R.3		

	APPARATUS — Continued	Yes	No
	(c) are accurate at 143° F. C.20		
	Standard		
	Indicating		
14	Recording thermometers: (Number.....)		
	(a) are provided and installed in each holder C.20		
	(b) are checked daily by plant operator R.4		
	(c) are accurate at 143° F. C.20		
	Standard		
	Recording		
15	Recording thermometer charts:		
	(a) are changed daily R.5		
	(b) are dated daily R.5		
	(c) are kept on file at least 90 days R.5		
	(d) for.....days were satisfactory C.20 (.....)		
16	Surface coolers:		
	(a) are free from leaks R.11		
	(b) are either (1) provided with suitable covers R.11		
	or (2) are well protected in a room used for no other purpose R.11		
17	Regenerative heaters or coolers are so operated that pasteurized milk is under pressure equal to or higher than unpasteurized milk R.12		
18	Bottling machine:		
	(a) is provided C.19		
	(b) is used C.19		
19	Capping machine:		
	(a) is provided C.19		
	(b) is used C.19		
20	Bottle caps have the proper designation thereon C.23		
21	Sediment tester:		
	(a) is provided C.27		
	(b) is used C.27		
	OPERATION		
22	Containers and utensils:		
	(a) are cleaned C.12		
	(b) are sterilized with either		
	(1) steam C.12		
	(2) hot water at 180° F. C.12		
	(3) hot caustic solution R.16		
	(4) (*a*) chlorine solution R.1 (Section III)		
	(*b*) and equipment and materials are available and used for making residual chlorine tests R.1 (Section III)		
23	Pasteurizers, pipes, pumps and other equipment:		
	(a) are cleaned after each day's run R.15		
	(b) pipes and parts are suitably stored R.15		
	(c) are sterilized just prior to use R.15		
24	Pasteurized milk:		
	(a) is immediately cooled to 50° F. or lower C.20		
	(b) is conveyed through sanitary piping to the bottler R.18		
	(c) is immediately bottled at the place of pasteurization C.20		
	(d) is conveyed through pipes or pumps not previously used for unpasteurized milk R.18		
	(e) is strained only through a metal strainer sterilized with the bottler R.19		

C = Sanitary Code, Chapter III and the accompanying number refers to the numbered regulations of that Chapter.
R = Rules and regulations of the State Commissioner of Health and the accompanying number refers to the numbered regulations under Section II of such rules and regulations.

Violation of any regulation of Chapter III of the Sanitary Code not covered in the above items shall be reported below:

Remarks: .....

SALE OF MILK

About.....quarts of milk are received daily from.....dairies.
.....quarts of milk are sold as Pasteurized Grade A.
.....quarts of milk are sold as Pasteurized Grade B.
.....quarts of milk are sold as Raw Grade A.
.....quarts of milk are sold as Raw Grade B.
About.....quarts of cream are received daily from.....
About.....quarts of milk are separated daily for cream.
If more than one grade of milk is bottled in the same apparatus, in what order are the different grades handled?.....
Milk sold in bulk?.....
Places where milk is sold.....

EQUIPMENT

Pasteurizer: number.....
type.....
make.....
capacity.....
make of valves.....
Indicating thermometers:
number.....
make.....
Recording thermometers:
number.....
make.....
Heater: type.....
make.....
Cooler: type.....
make.....
covers.....
Pumps: number.....
type.....
make.....

Filter: make.....
location in milk line.....
Bottler: number.....
type.....
make.....
Capper (if not attached to bottler)
make.....
Refrigerator: make.....
capacity.....
Boiler: type.....
horse power.....
steam pressure carried.....
Bottle washer: type.....
make.....
means of sterilization.....
Can washer: type.....
make.....
means of sterilization.....

Remarks: .....

County of Westchester

Department of Health

MATTHIAS NICOLL, JR., M. D., COMMISSIONER

White Plains, N. Y.

MILK PLANT INSPECTION

Plant operated by ..... City / Town / Village .....

Date of inspection ..... Permit No. .....

Inspected by ..... Accompanied by .....

About.....quarts of milk are produced daily.

.....quarts of milk are received daily from.....dairies.

.....quarts of cream are purchased daily from.....

.....quarts of milk are separated daily for cream.

.....quarts of milk are sold as RAW GRADE A.

ALL COWS from which milk is produced and sold as RAW GRADE A have been examined and tuberculin tested by licensed veterinarian within the last 12 months.

REPORT FILED at ..... (Place)

The original inspection was made on.....and .....reinspection have been made since that time.

Milk sold in bulk.....quarts daily.

Milk sold at plant in customers' containers.....quarts daily.

Water supply for washing bottles, cans, utensils and apparatus is from a..... .....located .....feet deep and is.....apparently pure and wholesome.

State any possible source of contamination located within 200 feet of source of water and note if not protected against surface drainage .....

.....

.....

Privy is.....clean. Vault is.....tight. Seats have.....self-closing lids, or door is.....self-closing and privy is.....screened against flies.

Yes	No		Yes	No	
		ROOMS OR BUILDINGS			BOTTLING MACHINE, MILK PIPES, PUMP, MILK COOLERS AND OTHER APPARATUS ARE:
.....	.....	(a) are suitable for the purpose	.....	.....	(a) of sanitary construction
.....	.....	(b) are well lighted	.....	.....	(b) taken apart daily, thoroughly washed, cleaned and sterilized
.....	.....	(c) are ventilated	.....	.....	(c) small parts are suitably stored so as to drain
.....	.....	(d) are kept clean	.....	.....	(d) and just before use, equipment is reassembled and sterilized either with steam or with hot water at 180° F.
.....	.....	(e) are free from flies			BOTTLES, CANS AND OTHER CONTAINERS are:
.....	.....	(f) and milk handling rooms do not open directly into a stable or living quarters	.....	.....	(a) thoroughly washed and sterilized with steam or hot water at 180° F.
		FLOORS			(b) protected against contamination between times of sterilization and usage.
.....	.....	(a) are watertight	.....	.....	STEAM OR HOT WATER BOILER
.....	.....	(b) are impervious			(a) provided H. P. or Cap.....
.....	.....	(c) are well drained			Steam pressure carried.....
.....	.....	(d) and floor drainage is properly disposed of	.....	.....	(b) adequate
		Apparatus			REFRIGERATION
		BOTTLING MACHINE			
.....	.....	(a) provided	.....	.....	(a) provided
.....	.....	(b) used	.....	.....	(b) adequate
		CAPPING MACHINE	.....	.....	(c) and bottles are not submerged if stored in water
.....	.....	(a) provided	.....	.....	Milk handlers are cleanly in person and methods
.....	.....	(b) used			*NOTE:* Have specimens of body discharges been taken and examined?
		BOTTLE CAPS			
.....	.....	(a) are obtained in sanitary tubes			
.....	.....	(b) are kept therein until used			
.....	.....	(c) and have proper designations thereon			

County of Westchester

DIVISION OF SANITATION
J. L. BARRON, DIRECTOR

Department of Health
MATTHIAS NICOLL, JR., M. D., COMMISSIONER

White Plains, N. Y.

.....193...

Dear Sir:

The following is the result of examinations of samples of your milk and cream taken ..... 193....

GRADE	TEMP.	FAT	BACTERIA PER C. C.	

Yours very truly,

.....

LEGAL REQUIREMENTS

Temperature	—not over 50°F.
Butter fat (milk)	—not under 3%
Butter fat (cream)	—not under 18%

Bacteria				
Grade A Past. cream	—not over	100,000	per	cc.
Pasteurized cream	— " "	500,000	"	"
Raw cream	— " "	200,000	"	"
Grade A Past. milk	— " "	30,000	"	"
Grade B Past. milk	— " "	50,000	"	"
Grade A Raw milk	— " "	30,000	"	"

(The above results are not to be used for publication, advertising or soliciting purposes.)

County of Westchester

Department of Health

MATTHIAS NICOLL, JR., M. D., COMMISSIONER

White Plains, N. Y.

DEALER'S APPLICATION FOR MILK PERMIT

Application of .....
(Name of Applicant)

Address .....to the Commissioner of Health of Westchester County:

(1) Application is hereby made for a permit to sell *Cream* and *Milk* of the following grades:

PASTEURIZED GRADE A CREAM PASTEURIZED GRADE A MILK CERTIFIED MILK
PASTEURIZED CREAM PASTEURIZED GRADE B MILK RAW GRADE A MILK
RAW CREAM

(Cross out names of grades you do *not wish to sell*)

The name and address of each producer from whom milk or cream is received to be sold in the following towns and villages: .....
.....
together with the proposed grade and approximate daily amount of milk or cream to be furnished to me by each said producer as well as the amount of cream and the amount of milk and proposed grade or grades thereof which I expect to supply myself are set forth on the back of this application.

I am familiar with and prepared to comply with the provisions of Chapter III of the Sanitary Code and the regulations of the Westchester County Board of Health and it is understood that a permit, if granted, may be suspended at any time without a hearing or revoked at any time by the state commissioner of health or the county commissioner of health after a hearing on due notice for misrepresentation as to grade or quality of milk sold or offered for sale, or for wilful or repeated violations of any of the provisions of Chapter III of the Sanitary Code or of regulations of the Westchester County Board of Health.

(Signed) .....
Applicant

Date .....

Supplementary Application

(2) Under the provisions of Regulation 23 of Chapter III of the Sanitary Code application is hereby made for permission to sell and deliver milk in containers of five gallons or more, properly labeled as to grade and destination and with covers secured to hospitals, institutions, camps, hotels, restaurants and other public eating places to be consumed on the premises.

Date ..... (Signed) .....
Applicant

Supplementary Application

(3) Under the provisions of Regulation 23 of Chapter III of the Sanitary Code application is hereby made for permission to sell and deliver milk to customers in quantities of four quarts or less at the place where pasteurized or bottled, in containers provided by such customers.

Date ..... (Signed) .....
Applicant

NOTE: Excepting in stores, hotels, restaurants or other places in which milk or cream is served for consumption on the premises, and excepting that sold to be used solely for manufacturing purposes, no milk or cream may be sold without a permit from the commissioner of health.

NAME AND ADDRESS OF PRODUCER	PROPOSED GRADE OF MILK	AMOUNT	PROPOSED GRADE OF CREAM	AMOUNT

Milk and cream distributed *retail* in Westchester County, excluding the cities of Mount Vernon, New Rochelle and Yonkers. (daily average in quarts).

Certified	.....	B Past. (bottled)	.....
A Past. (bottled)	.....	B. Past. (bulk)	.....
A Past. (bulk)	.....	Cream (bottled)	.....
A Raw (bottled)	.....	Cream (bulk)	.....
A Raw (bulk)	.....		

Sold *wholesale* to Milk dealers in Westchester County. (daily average in quarts).

NAME AND ADDRESS	Cert.	A Past. Bot.	A Past. Bulk	B Past. Bot.	B Past. Bulk	A Raw Bot.	A Raw Bulk	B Raw for Past.	Cream Bot.	Cream Bulk

County of Westchester

Department of Health

MATTHIAS NICOLL, JR., M. D., COMMISSIONER

White Plains, N. Y.

PERMIT NO. .....

To Sell Milk or Cream

Pursuant to authority vested in me by the State Sanitary Code and subject to the conditions and requirements therein prescribed, and to the regulations of the Westchester County Board of Health, a permit is hereby issued to

....
(Name of Applicant)

Address .....

to sell—

PASTEURIZED GRADE A CREAM	PASTEURIZED GRADE A MILK	CERTIFIED MILK
PASTEURIZED CREAM	PASTEURIZED GRADE B MILK	RAW GRADE A MILK
RAW CREAM		

(Cross out any of the above designations not included in application.)

within the County of Westchester (excluding the cities of Mount Vernon, New Rochelle and Yonkers.)

....
Commissioner of Health

Supplementary Permit

(Not effective unless signed by Commissioner of Health)

The above applicant is further authorized to deliver milk, in quantities of five gallons or more in cans to hospitals, institutions, camps or to hotels, restaurants or other public eating places within this municipality.

....
Commissioner of Health

Supplementary Permit

(Not effective unless signed by Commissioner of Health)

The above applicant is hereby further authorized to deliver milk to customers, in quantities of four quarts or less, at his

....
(Insert "farm," "bottling plant" or "pasteurizing plant')

in containers provided by such customers.

Issued on ....
(date) *Commissioner of Health*

Expires on .....
(date)

Chapter VII

FOOD SANITATION

Sanitary inspection of foods and food selling places is generally one of the last functions of a health department to be effectively carried out. Much time is wasted by so-called sanitary inspectors in misdirected efforts along this line. To be of value, food inspection must be well organized and done by capable and responsible inspectors. Fortunately much of the food now supplied to the public is so prepared and protected by the manufacturers as not to require more than the inspection which the purchaser is able to give. Certain foods such as meats are necessarily subject to rigid sanitary inspection by the federal government.

Nevertheless, it is essential that food selling places be maintained in a clean condition, that the facilities for storing and protecting foods be adequate, and that foods subject to serious deterioration or capable of carrying disease be subject to some degree of sanitary control by the public health authority. Westchester, because of its nearness to New York City, serves as an outlet for some unwholesome food which may be sold to unscrupulous dealers to escape city inspection. Fortunately, the sanitary requirements of the New York City Health Department applying to foods shipped into the city are largely

effective also for the whole metropolitan area. The activities of federal food inspection are also concentrated in the metropolitan area. The New York State Department of Agriculture and Markets enforces certain state regulations relating to foods, particularly as to misbranding and adulteration. These services relieve, but do not obviate the necessity for local food inspection.

The work of food inspection in the health district has been carried on previously only in the city of White Plains, but is now being extended throughout the health district. Report forms have been prepared for use in making sanitary inspections of food selling places and of eating places. These are designed to facilitate quick and accurate inspection and to provide a file record. By means of a carbon copy of the inspection report the owner or manager is immediately furnished with a definite record of the inspection and the conditions found requiring correction. These forms are shown on pages 73 and 74.

The inspectors are given authority by the county sanitary code to condemn foods which are found to be unwholesome. Action of this nature occurred when a soda water bottling plant had occasioned numerous complaints because of a dirty product. The owner was summoned before the commissioner and notified to cease operation until certain sanitary improvements were made. The next morning he arose before dawn and manufactured twenty-five cases of soda water.

Location..... Date.....
Street Town or Village

STORE - MEAT MARKET
Inspection Report
Westchester County Department of Health

Store Name.....

Owner or Manager.....

	Yes	No
1. Building		
(a) Suitable structure		
Walls satisfactory		
Floors satisfactory		
(b) Adequate ventilation		
(c) Adequate light		
(d) Screens provided		
(e) Toilet (.....)		
Properly located		
Clean		
(f) Lavatory		
Clean		
Soap provided		
Towels provided		
(g) Store clean		
(h) Premises clean		
(i) Free from vermin		
2. Care of Foodstuffs		
(a) Vegetables protected		
(b) Bakery products protected		
Filled pastries refrigerated		
(c) Canned goods satisfactory		
(d) Other foodstuffs satisfactory		
(e) Eggs properly labelled		
(f) Refrigeration (.....)		
Adequate (Temp. .....)		
Clean		
Milk handled		
Permit issued		
Properly refrigerated		
(g) Proper refuse storage		
Proper refuse disposal		

	Yes	No
3. Meats and Meat Products		
(a) Meats properly stamped		
(b) Satisfactory condition		
(c) Properly protected		
Cases and trays clean		
Blocks clean		
Counters clean		
Scales clean		
Utensils clean		
Slicer clean		
Chopper clean		
Other equipment clean		
Hot water provided		
(d) Refrigeration (.....)		
Cooler adequate (Temp.....)		
Cooler clean		
Display cases adequate		
(e) Proper refuse storage		
Proper refuse disposal		
4. Personnel		
(a) Number of employees (.....)		
(b) Health examinations		
Physical		
Body specimens		
(c) Garments clean		

.....

.....

.....

Inspector

Location _____ Date _____
Street Town or Village

EATING PLACES
INSPECTION REPORT

WESTCHESTER COUNTY DEPARTMENT OF HEALTH

Name of Establishment _____

Owner or Manager _____

	Yes	No
1 Building		
(a) Suitable structure		
Walls satisfactory		
Floors satisfactory		
(b) Adequate light		
(c) Adequate ventilation		
(d) Screens provided		
(e) Toilet ( ) Men's		
Properly located		
In good repair		
Clean		
(f) Lavatory		
Hot water		
Soap provided		
Individual towels		
Clean		
(g) Water supply		
Public		
Private		
Examined (date) (result)		
Sanitary survey good		
(h) Sewage disposal		
Public sewer		
Private		
Satisfactory		
(i) Premises clean		
(j) Free from vermin		
2 Dining Room Provided		
(a) Clean		
(b) Table equipment satisfactory		

	Yes	No
3 Lunch Counter		
Soda Fountain		
(a) Foods properly protected		
(b) Milk served in bottles		
Properly refrigerated		
Approved source		
(c) Milk pump used		
Clean		
(d) Ice cream compartment clean		
(e) Counters & equipment clean		
(f) Sanitary drinking water service		
4 Dishes and Utensils		
(a) In good repair		
(b) Washed in hot soapy water		
(c) Rinsed hot		
(d) Hot water 180°F. or over		
(e) Adequate hot water supply		
5 Kitchen and Store Room		
(a) Tables and shelves clean		
(b) Kitchen equipment clean		
(c) Foodstuffs properly stored		
(d) Satisfactory refrigeration		
(e) Proper refuse storage		
Proper refuse disposal		
6 Personnel		
(a) Number of employees ( )		
(b) Health examinations		
Physical		
Body specimens		
(c) Garments clean		

_____

_____

_____

_____
Inspector

An inspector of the division discovered his action shortly thereafter and the entire six hundred bottles were thereupon opened and emptied into the sewer.

Poultry markets, where poultry are killed and dressed for retail trade, have been the source of numerous complaints because of their generally unsanitary condition. Considerable work has been done by the division of sanitation in improving the condition of these places and they are being placed under permit as rapidly as the sanitary condition of the individual market is improved. Two abattoirs, where meat is slaughtered for sale in the health district, have been forced to make necessary sanitary improvements and to provide approved veterinary inspection of the meats sold in the health district. A regulation of the sanitary code prohibits the sale of uninspected meats.

Chapter VIII

GENERAL SANITATION

One of the principal causes of complaints to the division arises from the improper disposal of garbage and refuse. Although much of the surreptitious dumping which occurs on vacant lots does not create a condition which affects health or is subject to any legal action by the health authority, nevertheless, any dump or place of garbage disposal regularly used and improperly maintained is liable to become a public health nuisance. To provide some means of controlling garbage disposal, a section was included in the sanitary code requiring that all garbage collectors not directly employed by a municipality be under permit from the health department. The enforcement of this regulation has helped to regularize garbage collection and has eliminated many of the irresponsible collectors. A great deal of work has been done to improve the sanitary condition of all dumps necessarily maintained in the health district. Some dumps have been closed, and others with more isolated and favorable locations have been secured; careful placing of the garbage and refuse in fills of proper depth and the use of sufficient covering material to prevent odor nuisances have been required.

In connection with this work the division has taken aggressive action in forcing consideration of the

WESTCHESTER COUNTY
DEPARTMENT OF HEALTH
White Plains, N. Y.

Matthias Nicoll, M.D., Commissioner

File_____

Inspected_____ By_____

Permit_____

APPLICATION

For Garbage and Refuse Scavenger Permit _____ 193__

To The Commissioner of Health

Sir: Under the provisions of Section 4, Article II, of the County Sanitary Code, application is hereby made for a permit to engage in the business of collecting, transporting and disposing of garbage and refuse and for contents of privies, cesspools, and septic tanks, concerning which the following information is submitted:

1. Name of applicant_____

2. Address Business_____
   Home_____

3. Areas or places of collection_____

4. Terms and details of contract, if any_____

5. Place and means of disposal (give names of property owners, location, area and depth of dump, material for cover, water supply, means for burning combustibles, etc.)

6. Estimate of quantity of garbage and refuse in cubic yards or tons per week_____

7. Hauling equipment and method of covering_____

It is understood that failure to comply with the terms and conditions of the permit herein applied for, or with the provisions of the county sanitary code, or to accomplish the collection, transportation, or disposal of such material in a manner not injurious to public health shall be cause for the suspension of such permit by the Commissioner, or the revocation of such permit by the Commissioner after due notice and hearing.

Signature_____

Note: This application must be accompanied by a written statement of permission from the owner of any property on which dumping is proposed.

WESTCHESTER COUNTY DEPARTMENT OF HEALTH

WHITE PLAINS, N. Y.

MATTHIAS NICOLL, JR., *Commissioner*

PERMIT

FOR DISPOSAL OF REFUSE

Application having been duly made to the County Commissioner of Health as required by Section 4, Article II, of the Westchester County Sanitary Code, permission is hereby given to.....

to engage in the business of.....

.....

.....

subject to the following conditions:

Date:

.....
Commissioner

NOTE: This Permit is issued subject to revocation for cause.

construction of incineration plants by the various municipalities. As a result of this work the village of Pelham Manor constructed a modern incinerator during the past year and now disposes of the garbage from the neighboring villages of Pelham and North Pelham on a contract basis. As a result of the agitation of the incineration problem, legislation has just been passed by the state legislature which will enable adjoining towns and villages to cooperate in the construction and operation of incinerators and in the disposal of metal junk. Many of the incineration plants now in operation are overloaded or handicapped by antiquated design, particularly with respect to adequate combustion temperatures. The division has taken an active part in urging the replacement or extension of these plants in order to abate nuisances.

Another phase of general sanitation with which the division is indirectly concerned is that of plumbing and building inspection. This service, which is an exercise of police power, is not properly a duty of the health authority and it was necessary soon after the formation of the county health department to refuse to assume responsibility for plumbing inspection in many parts of the health district. However, the division has taken interest in a proposal to organize plumbing inspection on a county basis which would involve also the adoption of a modern and uniform plumbing code. The director of the division found it necessary in this connection to oppose and secure the defeat of

proposed legislation which would have set up a county plumbing board in a highly improper and irresponsible form, in which the plumbers would have had the majority control.

Abatement of public health nuisances is one of the most important functions of the health authority and this is necessarily a duty of the division of sanitation. The legal background of health authority with respect to nuisance abatement must be thoroughly understood and the limits of this authority kept clearly in mind. Boards of health in New York state, and generally elsewhere, possess a peculiar combination of authority since legislative, judicial and executive functions have been conferred upon them with regard to matters of health. These are powers, all of which may be utilized in dealing with nuisances. In the exercise of the legislative power a board may and should enact regulations to provide its representatives with specific and uniform requirements, especially relating to nuisances. A board of health uses its judicial power when it determines the status of alleged nuisances and when it passes judgment on violations of its regulations and orders. Its executive power is employed when it takes steps to enforce its decrees.

In the work of the division of sanitation it has been found necessary to draw very carefully the distinction between public nuisances and public health nuisances,

the former being subject only to the police power as exercised by police officers or by individuals in enforcing their rights in the public courts. Procedure under the public health law is hedged about with restrictions which ordinarily prevent the quick action which should be taken when dealing with conditions prejudicial to the public health. The division of sanitation, in 1930, initiated legislation in the form of an amendment to the Public Health Law which gave to the commissioner of a county health department equal authority with the board of health to investigate and abate nuisances. The use of the authority to issue subpoenas upon persons alleged to be responsible for public health nuisances is an effective tool in bringing about abatement of unsanitary conditions.

The position of an inspector of the division of sanitation in dealing with nuisances is somewhat that of a prosecuting attorney who undertakes to secure settlement of all cases out of court but, failing that, prepares his evidence, produces his witnesses and presents the evidence and his own findings of fact to the board of health, or to the commissioner, sitting as a court. As a matter of legal procedure required by Regulation 3, of Chapter VI of the state sanitary code, the board or commissioner having determined a condition to be a nuisance affecting public health, must furnish the offender with a written statement of its findings, and then give him an opportunity to be heard, after which an order requiring the abatement of the nuisance

may be issued and served. A reasonable time for compliance with the order must be allowed, following which the offender may be summoned before the board and a penalty imposed. This fine, for a single violation, cannot exceed one hundred dollars and, if the offender fails to pay it, may be recovered by civil action.

This procedure is greatly shortened where regulations have been enacted and penalties provided by the board of health, or when specific sections of the state sanitary code are involved, since the inspector may notify the offender of the pertinent regulation and his apparent violation of it. If efforts to secure voluntary compliance with the regulation fail, the inspector must then make a full and complete report of all the facts to the board, or to the commissioner, who may then summon the offender, by warrant if necessary, and, after a hearing, impose the prescribed penalty. The inspectors of the division are carefully trained to make thorough investigation of nuisance complaints, to avoid arguments and to confine themselves to rational and precise statements as to findings and recommendations in dealing with complaints and offenders..

The necessity for a sanitary code became quite evident during the first year of dealing with nuisances. Accordingly a code was drawn up with considerable care by the division to include general requirements covering those conditions which are considered to be nuisances affecting public health and this latter qualification was definitely

WESTCHESTER'S HEALTH

Published Weekly By The

WESTCHESTER COUNTY DEPARTMENT OF HEALTH

At White Plains, N.Y.

MATTHIAS NICOLL, JR., M.D.

Commissioner

Vol. 1 WHITE PLAINS, N. Y., APRIL 13, 1931 No. 24

COUNTY SANITARY CODE ADOPTED

OFFICIAL NOTICE

At a regular meeting of the Westchester County Board of Health held at White Plains, N. Y., on April 7, 1931, the following resolutions were unanimously adopted:

RESOLVED that the Westchester County Board of Health, pursuant to sections 20-b and 21 of the public health law, adopt and it does hereby adopt a sanitary code to be known as the County Sanitary Code, to take effect May 1, 1931, and to read as follows:

ARTICLE I

General Provisions

§ 1. **Definitions.** "Westchester County Health District" shall mean the health district of said county established under Chapter 371 of the laws of 1929.

"Department of Health" shall mean the Westchester County Department of Health.

"Board of Health" shall mean the Board of Health of the Westchester County Health District.

"Commissioner" shall mean the Commissioner of Health of the Westchester County Department of Health.

"County Sanitary Code" shall mean the sanitary code adopted by the Board of Health of Westchester County pursuant to sections 20-b and 21 of the public health law.

A "dwelling" is any house or building or portion thereof which is occupied in whole or in part as the home, residence, or sleeping place of one or more human beings.

"Abattoir" means any building, or part thereof, used for the commercial purpose of slaughtering, dressing, packing, or rendering any beeves, calves, goats, sheep, swine, poultry, or other animals or meat thereof intended for human consumption.

§ 2. **Sanitary Code. Where In Force.** The provisions of the county sanitary code shall be in force thoughout the Westchester County health district.

§ 3. **Penalty for Violations.** Every violation of, or failure to comply with, any of the provisions of the sanitary code of the State of New York, or any of the provisions of the county sanitary code or any order made pursuant thereto or pursuant to law shall be punishable by a penalty not to exceed one hundred dollars for a single such violation or failure. Each day on which such violation or failure continues shall constitute a separate offense. Nothing herein contained shall be construed to exempt an offender from any other penalty provided by law.

§ 4. **When to Take Effect.** Every regulation of the county sanitary code, unless otherwise specifically stated, shall take effect on the first day of May, 1931.

§ 5. **Enforcement by Local Boards of Health.** It shall be the duty of each local board of health and/or each local health officer in the Westchester County health district, existing pursuant to law, to enforce any and every regulation of the county sanitary code.

§ 6. **Interference with Notices.** No person shall remove, mutilate, or conceal any notice or other placard of the department of health posted in or on any premises except by permission of the commissioner or his authorized representative.

In the event of such notice or placard being removed, mutilated, or concealed, it shall be the duty of the owner or, if occupied, of the occupant of said premises immediately to notify the commissioner.

ARTICLE II

Sanitation

§ 1. **Pollution of Atmosphere.** No owner, lessee, manager, tenant or occupant of any building, vessel or place shall cause, suffer or allow smoke, cinders, gas, vapors, fumes, dust, or offensive or noxious odors to escape or be discharged from any such building, vessel or place in quantities sufficient to be injurious to the public health.

§ 2. **Disposal of Offensive Material.** No person shall dispose of any offensive refuse, offal, garbage, dead animals, or fecal matter by depositing such material on any lot, premises, or place without the written consent of the owner of such lot, premises or place, and such material shall be so covered, placed or treated as not to create a nuisance detrimental to public health. No owner of a lot, premises, or place shall permit the deposit of such material unless it shall be covered, placed, or treated so as not to create a nuisance detrimental to public health.

§ 3. **Exposure of Sewage.** No privy, cesspool, sewage disposal system or sewage pipe or drain shall be constructed so as to expose or discharge the sewage contents thereof to the atmosphere, or on the surface of the ground, or into any storm sewer, nor so as to contaminate any source of supply of drinking water or to discharge such contents into any water course or body of water unless a permit for such discharge shall have been issued therefor by the state commissioner of health and such discharge shall be made in accordance with the requirements thereof.

§ 4. **Disposal of Refuse.** No person, firm, or corporation, except a municipality, shall engage in the business of collecting, transporting, or disposing of offensive refuse, offal, garbage, dead animals, or the contents of privies, cesspools, or septic tanks without a permit therefor issued by the commissioner, or otherwise than in accordance with the terms of said permit and with the provisions of the county sanitary code.

(Continued on Page 2)

WESTCHESTER'S HEALTH

Official Organ of the Westchester County Department of Health

Published Every Monday at 8 Church Street, White Plains, N. Y.

Telephone White Plains 9225

MATTHIAS NICOLL, JR., M.D.....*Editor*

MARJORIE T. BELLOWS.....*Associate Editor*

Application for entry as Second Class Matter pending.

WHITE PLAINS, N. Y., MONDAY, APRIL 13, 1931

COUNTY SANITARY CODE ADOPTED

(Continued from Page 1)

Failure to comply with the terms of such permit or with the provisions of the county sanitary code or to accomplish the collection, transportation, or disposal of such material in a manner not injurious to public health shall be cause for the suspension of such permit by the commissioner or the revocation of such permit by the commissioner after due notice and hearing.

§ 5. **Unsanitary Buildings.** Whenever any building, or a part thereof, becomes unsanitary, and the owner shall have failed to comply with an order of the board of health to place the same in a sanitary condition, the commissioner may issue an order, to be affixed conspicuously on the building, and served on the owner, agent, lessee, and/or occupant thereof, requiring all persons to vacate such building and to discontinue its use at such time as the commissioner may determine, which time shall be stated in said order.

§ 6. **Supply of Water Required.** It shall be the duty of every person who shall have contracted or undertaken, or shall be bound to supply water for any building or portion thereof, occupied as a home or place of residence of one or more persons, to furnish at all times an adequate supply of potable water for drinking, culinary and sanitary purposes. Wherever a potable public water supply is available, no other supply shall be furnished for drinking purposes unless such other supply is potable.

§ 7. **Permit Required for Water Supplies in Realty Developments.** Any person, firm or corporation which shall engage in the development of any land area for the purpose of the construction thereon of two or more dwellings or which shall construct such two or more dwellings or erect any dwelling to be occupied by two or more families and which shall provide or undertake to provide a water supply for such dwelling or dwellings shall first submit to the commissioner an application for a permit to construct or provide such a water supply, accompanied by such plans, sketches, or report as may be required concerning the proposed water supply. If such application shall be approved, the commissioner shall issue a permit therefor and no water supply shall be constructed or provided except in accordance with the conditions of such permit nor prior to the issuance thereof, provided, that such permit shall not be required when the water supply for such dwellings shall be secured from a potable public water supply.

§ 8. **Permit Required for Sewage Disposal Systems in Realty Developments.** Any person, firm or corporation which shall engage in the development of any land area for the purpose of the construction thereon of two or more dwellings or which shall construct such two or more dwellings or erect any dwelling to be occupied by two or more families and which shall provide or undertake to provide a system of sewers, sewage treatment works, or separate sewage disposal system to serve such dwelling or dwellings erected thereon, shall first submit to the commissioner an application for a permit to construct or provide such sewers, works, or system, accompanied by such plans, sketches, report and other information as may be required concerning the proposed system of sewers, sewage treatment works, or sewage disposal system. If such application shall be approved, the commissioner shall issue a permit therefor and no sewers, works, or system shall be constructed or provided except in accordance with the conditions of such permit nor prior to the issuance thereof, provided, that such permit shall not be required when the sewage from such dwellings is discharged directly into a public sewer, and further provided, that such permit shall not be required when a permit shall have been issued for such discharge of sewage by the state commissioner of health.

§ 9. **Bottled Drinking Water.** No peson shall sell or offer for sale for human consumption any artificial or natural mineral, spring or other drinking water which at the source or after withdrawal therefrom has been subject to pollution or contamination by human beings or animals, or which is not wholesome and suitable for drinking.

When, in the judgment of the commissioner, such water is potentially unsafe for drinking, he may issue an order prohibiting its sale.

§ 10. **Ice.** No person shall sell or offer for sale any artificial ice except that which has been produced from a potable water supply under clean and sanitary conditions.

No person shall sell or offer for sale for domestic refrigeration or for use in foods or beverages, any natural ice which has been obtained from a polluted body of water.

§ 11. **Rendering Plants.** No person shall engage in or carry on the business of fat rendering, bone boiling, or manufacture of fertilizer without a permit therefor issued by the commissioner, but nothing herein contained shall prevent the rendering at an abattoir of fresh-killed meat suitable for human consumption.

ARTICLE III

Foods

§ 1. **Protection of Food.** Every store, place, or vehicle from which food or drink intended for human consumption, is sold, offered for sale, or served for consumption on the premises, and every place where such food or drink is cooked or prepared shall be operated and maintained at all times in a clean and sanitary condition. In every such store or place adequate washing facilities for the use of employees shall be provided. No food intended for human consumption shall be kept, sold, offered for sale, displayed or transported, unless protected from dust, dirt, flies or other contamination. No food or drink which is unwholesome or dangerous to the public health shall be sold or offered for sale for human consumption.

§ 2. **Condemnation of Unfit Foods.** Any food or drink sold or offered for sale shall be condemned and destroyed if, in the judgment of a duly authorized representative of the department of health, it is found to be putrid, decomposed, unwholesome or unfit for human consumption.

§ 3. **Abattoirs.** No person, firm or corporation shall maintain or operate an abattoir without first having obtained a permit from the commissioner. Such permit may be suspended by the commissioner for cause or revoked by the commissioner after due notice and hearing. All such permits shall expire annually on the first day of July and shall be renewable on or before such date in each year. Such permits shall be posted conspicuously on the premises for which they are issued.

In every building hereafter to be constructed or occupied as an abattoir the floor of every room where animals are killed or dressed, and the floor of every room wherein any meat, refuse, offal, fertilizer or other material derived from the slaughter of animals is drained or handled shall be made of impervious material and shall be watertight, properly drained, and connected with a sewer if such abattoir is accessible to such sewer. All walls, doors and casements in any such rooms shall be so constructed as to be readily cleaned and shall be kept in a clean and sanitary condition. All yards, pens or other premises connected with any abattoir shall also be kept in a clean and sanitary condition.

Every abattoir shall be provided with an adequate supply of hot and cold water and such an arrangement of hose and pipes as will permit effective washing of walls, floors and premises. It shall also be supplied with boiling water or live steam for the purpose of the thorough cleaning of all utensils, tools and equipment used in the handling or preparation of meat products and such utensils, tools, and equipment shall be thoroughly cleaned at least once during each day's usage.

All refuse or other offensive material from an abattoir shall be placed at once in covered watertight receptacles and removed each day or oftener.

Every abattoir shall be provided with proper toilet and lavatory facilities which shall be maintained in a sanitary condition. No such toilet shall open directly into a room where the work of such abattoir is carried on. Soap, running hot and cold water, and individual towels shall be provided for the proper cleansing of the hands of all persons who handle meat or its products in such abattoir. No person shall expectorate upon any floor or wall of an abattoir or upon any equipment therein, or upon any animal or carcass or product thereof. No dog or other animal shall run at large in any abattoir or premises thereof.

§ 4. **Uninspected Meat Prohibited.** No meat or meat products of beeves, calves, swine, sheep, or goats shall be sold or offered for sale in the county health district unless such meat or meat products shall bear the "inspected and passed" stamp of the United States Department of Agriculture, or that of the county department of health, or other official agency approved by the commissioner.

§ 5. **Sale of Oysters and Clams.** No oysters or clams shall be sold or offered for sale unless the containers in which such oysters or clams are shipped or delivered shall have thereon or attached thereto a label, stamp or tag bearing the shipper's name together with a certificate number which shall have been approved by the United States public health service and issued to the shipper for the current year by the state in which such oysters or clams were harvested indicating that the proper authorities have inspected the grounds from which the oysters or clams were last removed, and certify that such grounds are in sanitary condition.

ARTICLE IV

Milk and Cream

§ 1. **Designation of Grades.** No milk shall be sold or offered for sale unless it shall bear prominently one and only one of the following designations:

Grade A Pasteurized	Certified
Grade B Pasteurized	Grade A Raw

§ 2. **Suspension of Permits.** The commissioner may suspend a permit to sell milk or cream whenever advised by an official agency that the provisions of the New York State sanitary code or the county sanitary code are not being complied with.

§ 3. **Use of Fore Milk Strip Cup Required.** Any person, firm or corporation producing milk or cream to be sold or offered for sale as raw, or unpasteurized, milk or cream shall cause to be used at each and every milking of each and every teat of each and every cow producing milk or cream for human consumption in its raw state, a fore milk straining strip cup. The said cup shall be provided with a metal strainer and shall be of a type approved by the department of health. The person or persons milking and using a strip cup shall observe the appearance of the strainer after the passing through of a stream of fore milk from each teat and, if the strainer shows the presence of flaky, coagulated or bloody milk, such cow's milk shall be excluded until a certificate of a licensed veterinarian is secured stating that the milk of said cow is safe for human consumption. The fore milk so collected in a strip cup shall be excluded from the milk supply.

§ 4. **Raw Milk Not to be Bottled in Pasteurizing Plants.** No person, firm or corporation shall bottle any raw milk or raw cream in any pasteurizing plant supplying pasteurized milk or cream to be sold or offered for sale in the Westchester County health district.

§ 5. **Inspection of Dairies Required.** No milk or cream shall be sold or offered for sale in the Westchester County health district as pasteurized milk or cream unless an inspection has been made during the previous twelve months of each dairy from which such milk or cream is obtained, such inspections to have been made by a person approved for such work by the commissioner. A report of the result of such inspection shall be made upon an official dairy score sheet issued or approved by the department of health. Such report shall be filed in the pasteurizing plant, creamery, or shipping station to which such milk is delivered and the last three such reports shall be retained on file. Each new or additional dairy from which such milk or cream shall be obtained shall first be inspected by such approved person and shall be found to be producing milk in a clean and sanitary manner before the milk is received.

§ 6. **Physical Examination of Dairy Animals.** No milk or cream shall be sold or offered for sale in the Westchester County health district unless such milk shall be from cows which shall have been physically examined during the previous twelve months by a licensed veterinarian. The results of such physical examinations shall be reported on certificate forms approved by the commissioner, and within twenty-four (24) hours after the conclusion of the examinations shall be filed at the pasteurizing plant, creamery, shipping station, or bottling plant receiving such milk. Each cow found by such physical examination to be unsound or unhealthy shall be immediately segregated from the herd and the milk from said cow shall be excluded from the supply of milk to be sold or offered for sale.

§ 7. **Examination of Cattle Dealers' Herds.** No milk or cream shall be sold or offered for sale in the Westchester County health district which shall be produced on a dairy farm where the business of buying and selling cattle is carried on unless every dairy animal which shall be brought on to such dairy farm shall first have been physically examined by a licensed veterinarian and found to be sound and healthy. Every dairy animal on such dairy farm shall be ear-tagged, each tag bearing a separate number, and a complete physical description of each animal must appear opposite the ear-tag number on a list which shall be attached to the certificate on file covering the veterinarian's examination of the herd on such dairy farm.

§ 8. **Bacterial Counts Required.** No milk shall be sold or offered for sale in the Westchester County health district unless a bacterial count shall have been made within the previous three months of a sample of the raw milk from each dairy producing such milk, such samples to have been taken at the pasteurizing plant, creamery, shipping station, or bottling plant receiving such milk. The method used in making such bacterial counts shall be the standard agar plate method or standard direct microscopic method. Reports of all bacterial counts in excess of the requirements of the New York State sanitary code or the county sanitary code shall immediately be transmitted to the producer of such milk and further bacterial counts on such milk shall be made at intervals of two days after the producer is so notified. If three such successive bacterial counts shall be found to be in excess of the requirements of the New York State sanitary code or the county sanitary code, such milk shall be excluded by the pasteurizing plant, creamery, shipping station, or bottling plant, and shall not be again received until the condition or conditions causing such excessive counts shall have been corrected as shown by a satisfactory bacterial count made on a sample of milk collected at the dairy farm of such producer. The results of all such bacterial counts, identified with the names of the producers, shall be sent to the Westchester County department of health once every three months.

§ 9. **Vehicles to Bear Dealer's Name.** Every wagon, truck or vehicle used in the transportation and distribution of milk and milk products shall have the name and address of the person, firm or corporation operating such vehicle clearly and legibly set forth in English on each of the two sides. The name and address shall be in letters which shall be not less than three inches in height and which shall average not less

than one and one-half inches in width. Every such wagon, truck or vehicle shall be kept in a clean and sanitary condition.

§ 10. **No Caps Permitted at Distributing Stations.** No milk or cream bottle caps shall be kept, stored or used at any distributing station or plant or place where milk or cream is received in bottles for distribution. Any bottle of milk or cream received with the cap removed or damaged shall not be again capped.

§ 11. **Milk Containers Not to be Removed Where Communicable Disease Exists.** No milk or cream bottles or containers shall be removed from any dwelling or place where a case of bacillary dysentery, diphtheria, paratyphoid fever, poliomyelitis, scarlet fever, septic sore throat, smallpox, typhoid fever or undulant fever, is known to exist until permission is given by an authorized representative of the department of health. Immediately before return to the milk dealer such bottles shall be thoroughly cleaned by means of hot water containing soap. In transit, such bottles shall be kept separate from other bottles. No such bottle shall again be used until it has been sterilized at the bottling plant.

ARTICLE V

Swimming Pools

§ 1. **Reports Required.** Every corporation, association, or person maintaining and operating a swimming pool, for which a permit shall be issued by the commissioner under chapter X of the New York State sanitary code, shall submit monthly reports of daily operation on the first of each month on forms prescribed by the commissioner.

§ 2. **Bacterial Quality of Swimming Pool Waters.** Every swimming pool shall be so maintained and operated that, when in use, not more than 10 per cent of samples covering any three months period shall contain more than 100 bacterial colonies per c. c. when incubated for 24 hours at 37°C. on an agar or litmus lactose agar medium; no single sample shall contain more than 200 bacteria per c. c.; not more than two out of five 10 c. c. samples collected on the same day, or not more than three out of any ten consecutive 10 c. c. samples of the water collected at times when the pool is in use shall show a positive partially confirmed test for bacteria of the B. coli group.

RESOLUTION OF AMENDMENT

RESOLVED that Article IV of the Westchester County Sanitary Code be and it is hereby amended by adding thereto a new section to be known as section 12 to take effect January 1, 1932 and to read as follows:

§ 12. **Milk to be Sold in Containers.** No person, firm or corporation shall sell or offer for sale any milk to be consumed as such on the premises where sold unless such milk is contained in individual capped containers, filled and capped at an approved pasteurizing plant, creamery or bottling plant, and containing only the quantity of milk intended for use of the person served.

TUBERCULOSIS CLINIC SCHEDULE
April 13 to April 27, 1931

Clinician, Dr. Joseph E. Strobel, director, Division of Tuberculosis, assisted by county nurses and the local nurse.

April 14, Ossining, 10:00 A. M., Municipal Building.
April 15, Mamaroneck, 10:00 A. M., Society for Lending Comforts to the Sick.
April 16, Greenburgh, 10:00 A. M., Health Center.
April 16, Mt. Kisco, 2:00 P. M., Northern Westchester Hospital.
April 17, White Plains, 2:00 P. M., Board of Health.
April 18, Tarrytown, 10:00 A. M., Neighborhood House.
April 21, Verplancks, 10:30 A. M., Town Hall.
April 22, Port Chester, 10:00 A. M., Department of Health.
April 23, Mt. Kisco, 2:00 P. M., Northern Westchester Hospital.
April 24, Tuckahoe, 10:00 A. M., Eastchester Neighborhood House.
April 24, White Plains, 2:00 P. M., Board of Health.
April 25, Harrison, 10:00 A. M., Welfare Station.

NOTES FROM THE FIELD

Twelve chest clinics were held during the two week period from March 21 to April 4 inclusive.

Clinic	*No. of Patients*
Mt. Kisco	20 (2 clinics)
Tarrytown	10
Ossining	18
Croton	20
Port Chester	17
White Plains	22 (2 clinics)
Harrison	11
Tuckahoe	15
Shrub Oak	11
Peekskill	15
Total number of patients examined	159

Since the clinic in Croton was the first chest clinic to be held there under the auspices of the Westchester County Department of Health, considerable local interest was aroused. The clinic was held in the new Croton High School, through the courtesy of Dr. Thomas Wagner, principal. Dr. W. N. Miller, local health officer, cooperated with the County Department of Health, referring several patients to the clinic for examination.

This clinic answers a long felt need in the community, since formerly patients were obliged to attend either the Ossining or Verplancks chest clinics. Patients are being referred by the local doctors, and underweight school children will be examined.

COMMUNICABLE DISEASE CONTROL
Current Statistics*

Disease	*Number of Cases Reported Week Ending Apr. 4, 1931*	*Apr. 5, 1930*
Chickenpox	56	59
Diphtheria	1	1
Measles	44	37
Meningitis	0	0
Mumps	40	70
Pneumonia	21	21
Poliomyelitis	0	0
Scarlet Fever	31	19
Tuberculosis (Pulmonary)	12	3
Typhoid Fever	0	0
Whooping Cough	33	14

Diphtheria: Bedford—1; a case of laryngeal diphtheria in a child 3 years old who had never been given toxin-antitoxin.

Measles: Bronxville—12, Greenburgh—2, Larchmont—1, New Castle—1, North Tarrytown—11, Ossining—1, Pelham—1, Scarsdale—1, Tarrytown—14.

German measles: Bronxville—2, Harrison—1, North Pelham—2, Ossining—2, Peekskill—2, Pelham—1, Pelham Manor—1, Pleasantville—2, Scarsdale—19, Tarrytown—2, Yorktown—1.

Scarlet fever: Cortlandt—4, Harrison—1, Mt. Pleasant—1, New Castle—1, Ossining—12, Port Chester—2, Scarsdale—5, Tarrytown—2, Tuckahoe—1, White Plains—2.

Concentration of cases (5 or more):

Chickenpox: Cortlandt—7, Elmsford—5, Port Chester—14, Scarsdale—16, White Plains—11.

Mumps: Ossining—12, Port Chester—8, White Plains—6.

Whooping cough: Mt. Kisco—6, Port Chester—11.

*For the County Health District which includes all towns and villages and the city of White Plains.

stated in each section. The code also included articles on foods, milk and cream, and swimming pools, previously referred to.

Such a code serves the purpose of defining the conditions on which the health authority may act, particularly by omission of reference to those matters subject only to general police regulations or private action. There is something peculiarly potent in the printed regulation in its effect on the offender. When its general terms apply to a specific condition requiring correction, it is more effective than any written or verbal statements the inspector may make. A sanitary code, properly drawn, simplifies the work of the inspector, speeds up the procedure of handling nuisances, and permits a more consistent and uniform treatment of complaints.

CONCLUSION

Sanitation is an unfolding problem in Westchester where the population will ultimately reach a million. With the greater density of population, the public will become increasingly critical of environment and more sensitive to the disagreeable and unsatisfactory aspects of it. The county health department is organized to grow with its problems. Undoubtedly the same principle of organization will extend to other functions of government in Westchester in that the multiplicity of local governing units will be replaced by a centralized and efficiently organized county or city government. Great economies can be achieved by this change. The handicap of rural town government with all its limitations will thereby be removed from urban growth and city planning can become vital and effective.

The division of sanitation, alert to the public health engineering problems of the future, can exercise an important influence on the development of Westchester. Through the manifold contacts of the health department and the respect generally accorded the public health point of view as expressed by responsible officials, sound policies of municipal planning can be fostered, construction of sanitary works promoted, and laws, ordinances and activities of other units of the government coordinated with the functions of the health department.

Elsewhere, in the local administration of public health, there should be a growing appreciation of the value of engineers for dealing not only with problems of sanitation, but also with the work of organization and administration. The unsupervised work of the untrained, non-technical sanitary inspector is not representative of the results which can be obtained through engineering direction and training of such inspectors. Where units of local health administration are too small to permit the employment of engineers, their services should be made available by state health departments assigning experienced public health engineers to districts comprising a number of local or county units wherein the work of sanitation can be properly organized and supervised.

Such an arrangement requires an expansion and decentralization of state divisions of sanitation and is being established to a limited extent in some of the states. As the benefits of this use of engineering personnel become apparent to city, county and state health organizations, there should be an increasing employment of the profession and a corresponding betterment of salaries paid not only to the engineers but to all those dealing with sanitation. In both these respects the Westchester unit is showing the way.

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